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AIR CONDITIONING & REFRIGERATION News

THE NEWSPAPER OF THE INDUSTRY

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INSIDE DOPE

by GEORGE F. TAUBENECK

Pin-Point Pride
Protocol
Nuts to the Nutty
The Sensible Dote on Common Sense
Exciting Perfume
Personnel Problem
Higher Education
Realism vs. Poetry
She's Still Single
Often They're Lonely
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How Can You Satisfy Them?
Expensive Education
And Who's Wrong?
Who's Where?
Women Are Ageless
'The Road to Hell Is Paved With Good Intentions'
They Have Their Own Standards
Privileged Attire
Words Fail Us
You Tell Us Why

Pin-Point Pride

"Yeah, I saw her diamond ring," catted Mary. "And the first thing I thought of was my home town in Arkansas—Little Rock."

"Why darling, I hear you're engaged to Harry," coughed Catherine. "Nice fellow. But I turned down his proposal once. Did he tell you?"

"No," sugared Margie, "but he did say he made a lot of stupid blunders before he met me."

Protocol

Chagrined was the rank-conscious wife of a Washington official when she was seated four places to the left of her hostess at dinner.

A subtle slur, she thought, might be in order.

"I suppose you newcomers to Washington do have difficulty putting your guests in their correct places," she insinuated.

"Oh, no," urbaned her hostess, pleasantly, "I find that those who matter don't mind, and those who mind don't matter."

Nuts to the Nutty

Young Mrs. Malone was delighted with her new house. Happily she surveyed the spacious living room. Its white balustrade was a particular pride-and-joy to her sense of luxurious living. In a pixieish mood she knelt at the foot of this staircase, closed her eyes, and strummed at the spindles as though they were the strings of a heavenly and melodious harp.

An embarrassed "ah-hem" caused Mrs. Malone to spin around toward the open front door. There stood the bakery delivery-man with his mouth open.

Mrs. Malone sat frozen to the spot, too humiliated to speak.

The baked-goods peddler coughed, "uh, Lady, woudjer be interested in our Today's Special? It's a—er—nut bread!"

The Sensible Dote on Common Sense

High caloried was the lunch at an insane asylum, and a female inmate began dreaming out loud after she wolfed it down with relish (and catsup).

"Wouldn't it be wonderful," she mused, "if a man would invite me out for cocktails, take me to dinner, and out to a luxurious night club? We'll dance, have champagne, romance. . . ."

One of the guards overheard this day dream.

"Listen, sister," she said, "you'll soon be out of here. You're talking sense!"

Exciting Perfume

". . . and here is one called MAYBE which we sell for $10 an ounce," proffered the perfume salesgirl.

(Concluded on Page 8, Column 1)

Westinghouse Opens Cleveland Center To Service Consumer Items In Area

CLEVELAND—A factory-operated Service Center to handle all Westinghouse consumer products from television sets to electric irons in the Greater Cleveland area is scheduled to open here Monday, Dec. 3.

It is the first such factory-run Center in which all major appliances, electric housewares, fans, vacuum cleaners, electric bed coverings, television sets, and radios—as well as Free-Westinghouse sewing machines —will be serviced, reports L. K. Baxter, manager of the service department of Westinghouse Electric Corp.

Approximately 250 dealers will have use of the Center and they can either have their customers call the Center direct or they can handle the placing of the service call themselves.

Baxter said the Center "is designed and will be manned to give the best possible service to Westinghouse appliance and television set owners. It places responsibility for fast and satisfactory service in the hands of Westinghouse and frees dealers of this work, permitting the dealer to concentrate all his efforts on doing a selling job."

The new Center covers 19,000 sq. ft. Located at 4505 Euclid Ave., it is at a central, easily reached point in Cleveland. Ten telephone lines have been installed to assure quick telephone service. A corps of outside servicemen will cover the area, each man having an individual territory.

Here is how service calls will be handled by the Service Center:

All telephone service calls will be routed to the service call desk. One of three girls stationed there gets the customer's name, address, and phone number as well as the type of product needing service and the apparent trouble. This information goes directly to a dispatcher who assigns the day's request to the outside servicemen. Emergency calls are relayed immediately to the serviceman in the customer's neighborhood.

The outside serviceman will have a

(Concluded on Back Page, Column 4)

NPA Asks Mfrs. To File CMP Forms by Dec. 22

WASHINGTON, D. C.—National Production Authority has sent out a call for applications for controlled materials for the second quarter of 1952 and at the same time has released a new group of small manufacturers from the necessity of applying at all.

NPA asks that manufacturers file their CMP-4B applications by Dec. 22 and that applicants for controlled materials for construction scheduled during the second quarter and succeeding quarters file their CMP-4C forms by Dec. 15.

Manufacturers of Class B products will not be required to apply to NPA for their metals if their total requirements during the second quarter do not exceed 30 tons of carbon steel, 8 tons of alloy steel, 1,500 lbs. of stainless steel, 3,000 lbs. of copper and copper-base alloy, and 2,000 lbs. of aluminum. They can certify their own orders for these materials.

Current limits on self-certification are 5 tons of carbon steel, ½ ton of alloy steel, no stainless steel, 500 lbs. of copper and copper-base alloy, and 500 lbs. of aluminum.

Some manufacturers when they receive their forms from NPA will get specific instructions as to where to file their forms. Those who do not

(Concluded on Page 21, Column 2)

Universal Firm Appoints Top Executives

Parsons Heads Refrigeration Production, Sales; Plan Full Appliance Line

LIMA, Ohio—Appointment of top executives of the newly-formed Universal Major Appliance Co. was announced recently.

At the same time, Morton L. Clark, president, reported that addition of a number of new appliances would be announced at distributor meetings throughout the country.

"It is planned that Universal will have a full line of major appliances in a short time and that an aggressive program will be carried forward on the entire Universal major appliance line," a company announcement stated.

The concern is said to have already developed an automatic washer, a room cooler in ½ and ¾-ton sizes, a home freezer in 8, 12, and 17-cu. ft. capacities, a dehumidifier, and a clothes drier.

The company is a merger of the major appliance division of Landers, Frary & Clark, New Britain, Conn.; the Artkraft Mfg. Corp., Lima, of which Clark is president and director; and Baltimore Porcelain Steel Corp., Baltimore, Md., of which Clark is vice president and director.

Executive appointments were announced as follows:

Harry "Doc" Parsons will be executive vice president, sales, and

(Concluded on Back Page, Column 2)

G-E Starts Production On 3-Hp. Heat Pump

BLOOMFIELD, N. J. — General Electric is now in assembly line production of a reverse cycle or "heat pump" type of packaged year-round air conditioning system. Current model is a 3-hp. job, and it is planned to bring out a 5-hp. model early in 1952.

The heat pump models will be merchandised by the new Year-Round Air Conditioning Dept. of the G-E Air Conditioning Div. H. M. Brundage, manager of this newly formed department, recently announced the following appointments: W. A. Shoppelry, sales manager; A. M. Apman, assistant to sales manager, P. F. O'Neil, manager, commercial engineering; G. K. Marshall, manager, application engineering.

The conditioned air outlet on the

(Concluded on Page 4, Column 4)

G-E Ups Price of Freezer, 6 Refrigerator Models

CHICAGO—Increases in suggested list prices of six refrigerators and one home freezer have been announced by General Electric Co. New and old prices of the refrigerator models affected follow:

Model	New Price	Old Price
NCS8H	$274.95	$269.95
LF8H	344.95	329.95
LC8H	309.95	299.95
LF10H	374.95	359.95
NH8H	454.95	439.95
NH10H	494.95	479.95

The model NA11H home freezer, formerly priced at $419.95, is now priced at $429.95. Prices of three refrigerator models—the NC6H, NB4H, and NB8H, remain unchanged at $209.95, $219.95, and $249.95, respectively.

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Quiet-Heet Introduces 1952 Room Cooler Line

NEWARK, N. J.—Designed so that it will not extend beyond the normal building line, and priced at $199, a new ⅓-hp. window-type room air conditioner will highlight the 1952 line of "Quiet Kool" room coolers made by Quiet-Heet Mfg. Corp.

The ⅓-hp. model extends 7⅞ in. beyond the window on the outside, which Quiet-Heet officials say is not beyond the normal building line. Measuring 25½ in. wide, and 15 in. high, it extends 11½ in. into the room.

Known as the model G3A, it uses a single fan motor to drive both fans.

(Concluded on Page 21, Column 3)

Sept. NEMA Refrigerator Sales Down 60% from '50

NEW YORK CITY—Sales of household refrigerators by 16 firms reporting to the National Electrical Manufacturers Association during September numbered 215,459 units, the association announced recently.

This figure was 14% higher than the 187,603 units shipped in August but was 60% less than the 535,002 shipped during September, 1950. August sales were 64% under the same month last year.

The report showed that for the first nine months of the year, these

(Concluded on Page 21, Column 1)

Frigidaire Introduces Automatic Ice Cuber

DAYTON—A completely new automatic ice cube maker for commercial use has been added to the refrigeration products line of Frigidaire Div., General Motors Corp., reports W. F. Switzer, commercial sales manager.

Styled by Raymond Loewy, the new ice cube maker has been designed to produce solid, clear, rectangular ice cubes. This new product will manufacture up to 5,000 clear, solid, sanitary ice cubes in a 24-hour period.

The compact, all steel cabinet requires only a small amount of floor space, is table height, and will fit into corners, under bars, or counters. Dimensions are: 44¼ in. long, 31½ in. wide, 38⅝ in. high.

Exterior of the insulated cabinet is finished in harmonizing gray Dulux with a black acid-resisting porcelain-

(Concluded on Page 21, Column 4)

NARDA To Meet In Chicago Jan. 13-15

CHICAGO—Outstanding personalities in the appliance and television industries will address the 1952 annual convention of the National Appliance & Radio Dealers Association, to be held Jan. 13-15 at the Conrad Hilton (Stevens) hotel here.

Retailers from all parts of the United States will attend the convention to hear talks by Dr. Allen B. Du Mont, president, Allen B. Du Mont Laboratories, Inc.; Raymond J. Hurley, chairman of the board of Thor Corp.; Thomas F. Joyce, vice president and general manager, Raymond Rosen & Co., Philadelphia distributor; William F. Kelly, senior vice president, The Pennsylvania Co.; Glen McDaniel, president, Radio-Television Manufacturers Association; and R. M. Mitchell, general sales manager, Whirlpool Corp.

Walter G. Muhlbach, president, The Institute of Cooking and Heating Appliances, is scheduled to speak, as are M. R. Norton, chairman of the Edison Electric Institute Dealer Cooperation Committee; Fred D. Ogilby, vice president in charge of sales, Television and Radio Div., Philco Corp.; and D. A. Packard, Kelvinator's household sales manager.

Laurence Wray, editor of *Electri-*

(Concluded on Page 21, Column 4)

2 Cities Score Misleading Advertising

* * *

Los Angeles Newspapers Enforce TV Ad Standards

LOS ANGELES—A set of retail television advertising standards intended to protect newspaper readers from misleading advertising and legitimate business firms from unfair competition is now being enforced by the Los Angeles Newspaper Publishers' Association (LANPA).

Supporting the standards are five metropolitan newspapers: the *Times, Examiner, Herald and Express, Mirror,* and *The Daily News.* The standards are a modified version of regulations suggested by the local Better Business Bureau.

The bureau is now seeking the cooperation of radio and television stations in eliminating "bait and misleading" promotions. Up to a recent

(Concluded on Back Page, Column 1)

* * *

N.Y. Group Plans Voluntary Appliance Advertising Code

NEW YORK CITY—A voluntary code of ethics designed to eliminate misleading retail television and appliance advertising in New York City is being drafted by a special committee made up of three appliance chain executives.

Members of the committee are Abram Davega, vice president of Davega Stores Corp.; Jack Winer, president of Dynamic Stores; and Leon Mesnick, advertising manager of Vim Radio & Electric Co., Inc. The code is being drawn up in cooperation with the Department of Markets and the Better Business Bureau.

No details of the code have been worked out yet, according to Davega.

(Concluded on Page 21, Column 1)

OPS Gives 3 Options for Figuring Cost Increases

WASHINGTON, D. C.—Two optional methods of figuring Capehart amendment cost adjustments to ceiling prices were recently offered to manufacturers covered by Ceiling Price Regulation 22.

The Office of Price Stabilization has issued a revision to supplementary regulation 2 and a new supplementary regulation 18 incorporating these options.

In addition, OPS has issued a General Overriding Regulation 20 which offers a third optional method of figuring new cost adjustments to most small manufacturers covered by any order except CPR 34, the services order.

The revision to SR 2 permits manufacturers to figure their adjustments on the basis of their General Ceiling Price Regulation prices rather than their pre-Korean war prices. It is intended to be of particular benefit

(Concluded on Page 21, Column 3)

Merchants Arrange Free Customer Parking

BUFFALO—Appliance stores have joined with other merchants in the busy Chippewa-Tupper shopping area of downtown Buffalo in providing a free parking plan for customers.

Parking facilities for 5,500 cars in 13 lots within the area have been made available to shoppers. Stores paying the costs display signs: "Park Free While Shopping Here."

All 13 parking lots have erected signs showing they have been designated as customer sites. More than 50 merchants in the area are participating. These stores are cooperatively sponsoring large newspaper advertisements showing location of the parking lots.

Merchants stamp parking tickets offered by their customers. The stores are billed for the charges. Parking tickets may be stamped by more than one store, giving shoppers additional time. The stores then are charged parking lot rates.

AIR CONDITIONERS

3 to 50 Ton Units complete with evaporative condensers

BAL-AIR MANUFACTURERS
P. O. BOX 576
COLUMBIA, S. C.

Hotpoint Announces New Prices on Items Affected by New Excise

CHICAGO—Hotpoint Inc. has announced new list prices on appliances affected by the new manufacturers' excise tax. The prices pertain to merchandise shipped from the factory after Nov. 1.

Old and new prices of the items affected follow:

	Old Price	New Price
LK3 drier	$279.95	$307.19
LK1 portable ironer	59.95	65.94
LR4 ironer	129.95	142.94
MW6 garbage disposal	124.95	137.06
MC14 under sink dishwasher	294.95	323.68
MC15 cabinet dishwasher	319.95	351.09
MC16 dishwasher sink	419.95	460.66
MCP16 dishwasher sink pre-plumbed	439.95	482.66
MC16P 800 dishwasher sink (no top)	349.95	383.99

Restaurant Assn. Readies Refrigeration Bulletin

CHICAGO — A newly organized technical food and equipment advisory committee of the National Restaurant Association is now working on publication of a technical bulletin on refrigeration for restaurants, the association announced recently.

Don't Oversell Grocers?

Too Many Fixtures To Pay for Can Devour Small Profit And Lead to Bankruptcy, Says Food Industry Publisher

CHICAGO — An "alert" to the danger of overselling the food merchant on store modernization to the point where he cannot make a profit despite large increases in volume was sounded by James S. Haboush, publisher of *Food Mart News,* before the fifth annual convention of the National Commercial Refrigerator Sales Association which was held here recently.

"The profit margins in the food business are counted in pennies," Haboush counselled. "The volume potential in any given location, in any given size of store is usually strictly limited.

VOLUME INCREASE MUST BE ENOUGH TO COVER PAYMENTS

"When a major remodeling and modernizing job is undertaken, the possible increase in business should be sufficient to cover not only a return on the actual investment, but also sufficient so that when the month has passed the retailer has sufficient money left to meet whatever payments he has obligated himself for, as well as whatever net profit or salary he allowed himself before.

"If these factors are not fully considered, there is a real danger ahead —a danger to which the distributor should be fully alert."

Leading up to this conclusion, Haboush explained in more detail just what he meant. His talk, in part, follows:

"If not the first, certainly one of the most impressive experiences along this line came during my first days in Chicago. I came here to head a voluntary group for the old Durand, McNeill Horner organization known as 'The Shield of Quality Stores.'

"After I had been on the job only a few days I was taken up to the top floor. What I saw there truly astounded me—a vast expanse of floor packed full of store fixtures—row after row—aisle after aisle, of every description of store furnishings and equipment.

"This was all goods that had been acquired by Durand, McNeill Horner on first mortgage foreclosures. The company, supposedly in the wholesale grocery business, was, unwittingly forced to go into the store fixture business, largely because some visionary and over-ambitious salesmen had gone 'all-out' in salesmanship—but been a little remiss in foresight and sound judgment.

"There can be little doubt but that a good job of modernizing and converting to self-service will increase volume. Hundreds and hundreds of cases right here in Chicago demonstrate this fact over and over.

"Few, indeed,—if any—are cases where such improvements did NOT result in increased volume, faster traffic movement, greater turnover—and usually a net profit at least somewhat larger. Too often, however, such increases are out of all proportion to the greater investment and the larger obligation to which the retailer is bound.

"I think one case which came under our immediate observation is typical of many. This grocer had conducted a substantial business on the southeast side of the city for many years, and was, as retail grocers go, probably ranked as rather prosperous.

THIS GROCER WENT 'WHOLE HOG'

"Somewhat over a year ago, a very able and ambitious salesman called on him to discuss refrigeration. After the salesman had pointed out just how antiquated his setup was, how he was wasting the time of himself, his staff, and his customers, how he could increase business, cut overhead, speed store traffic and small profits, he decided to 'go whole hog' and completely modernized his store.

"After trying out the new arrangement for several months he concluded—and I quote substantially his very own comments on the subject, —'the salesman was substantially right in everything he said, and I must admit that my sales have increased—increased enough so that—provided I live to a very ripe old age, I might even have the new store paid for—and realize a little real profit during my final years.

" 'What the salesman neglected to point out, and what I overlooked was the fact that my volume would have had to more than double if I were to receive any return on my own investment, and increase probably three times before I could keep my monthly payments, and still have as much net income for myself as I had before—and that much potential business just is not here.

" 'If he had told me the whole story truthfully, he would have had a nice order plus a staunch friend. I could have financed the improvements myself and had a nice fairly modern store—and everybody would have been happy. As it stands, he and his firm are one outfit against whom I will sound a word of warning whenever my opinion is asked.'

"This is no rare or exaggerated case. In this particular instance there is little or no danger that the company—or the financier will have to take the equipment back and re-sell it at possibly 30 cents on the dollar.

"But, many retailers who have gone through similar experiences in over-selling are not in so fortunate a position. The result is trouble, trouble for the retailer, trouble for the distributor, trouble for the finance company—all of which adds to the cost of doing business, to the building of resentment against your industry as a whole.

"Of course salesmen should sell — that's their job. Of course they should point out the advantages of their plans, equipment, and services, that's a large part of their sales ammunition. But overselling is often dangerous causing ill will instead of goodwill—losses instead of profits, reflecting on the distributor and his firm.

'ONE PACKAGE DEALS' FAVORED

"On the other hand, I am a firm believer in the 'One Package Deal.' Now, at a glance this may seem like a contradiction, but on analysis, I think you'll find that it is not.

"What I mean by a one package deal is this: that one distributor should furnish a complete service: planning, blueprints, equipment, installation, lighting and electrical outlets, plumbing, suggestions on stock arrangements, financing, etc.

"There are several reasons of two general types for this: First, there is probably nothing more aggravating to the retailer than to be quoted a price for a definite job only to be informed as the work progresses that this will be 'extra,' that will add a little to the cost, the plumbing was not included, an additional light fixture or electrical outlet will cost so and so much—and so on.

"He is fully justified in feeling that he is being 'gipped,' that he was not told the truth.

"On the other hand, not being fully familiar with much of the type of work that is required, he is apt to be 'taken in' by some contractor if he attempts to have his work done himself.

"This also reflects on, and breeds ill will, for the distributor. It should be his job to perform an all-inclusive job encompassing every detail of store operation, and for one net price so that the retailer knows exactly what he is letting himself in for.

"Second, the distributor can himself well afford to look over every job brought in, see whether or not the potential of the store location, its management, etc., fully justify the work to be undertaken, the equipment to be supplied.

"Should the distributor think that the retailer has been a bit 'over sold' a few practical suggestions towards modifying here, and simplifying there will not only build untold goodwill on the part of the retailer, but also reduce the risks both for the firm and the customer."

MODEL 707. Low and wide, this self-service case can be serviced front or back. Can be joined for endless display.

MODEL 206. Double-decked to double your dairy sales. 12-ft. of refrigerated shelving in 6-ft. of floor space.

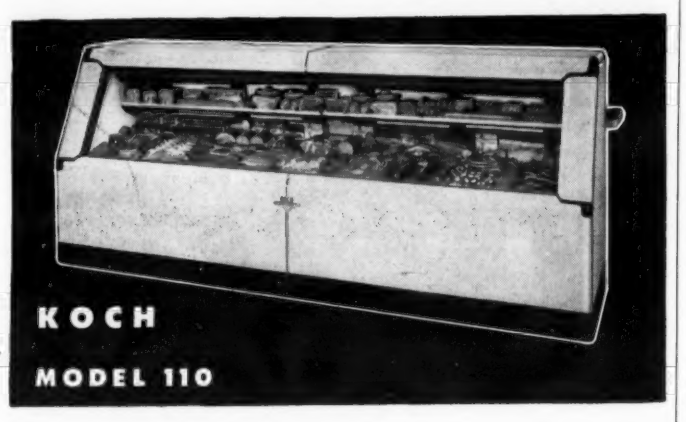
MODEL 3508. 8-ft. long wall type display case. For self-service display of dairy products and bottled goods.

MODEL 3865. A 65-cu. ft. reach-in refrigerator. One of the many popular KOCH self-contained refrigerators.

THE QUALITY REFRIGERATOR LINE

MODEL 5710. An open front self-service display case for pre-packaged fresh meats, produce, or dairy products.

SERIES 3100. An endless top display case made in 7 and 10 ft. lengths. Set up in any length for profitable display.



can't be beat for selling meat !

There's more to this striking display case than meets the eye. For in addition to good looks, it offers unmatched economy, durability, and performance. The thrifty Miraflex Cooling Unit (a KOCH exclusive) keeps temperature at a steady 38 degrees . . . maintains a relative humidity of 90 per cent. No moving parts . . . automatic defrosting.

COMPARE! Welded, all-steel construction . . . full 4-in. insulation . . . hermetically sealed, triple plate glass front . . . K-Beam fluorescent lighting . . . all porcelain exterior and display compartment . . . stainless steel storage lining . . . hard rubber sliding service doors.

Made in double duty models 6, 8, 10, and 12 feet long for remote installation of the condensing unit, and in a 6-ft. long (plus compressor housing) self-contained model.

Compare this display case feature by feature . . . and see for yourself why the choice is KOCH *wherever cold is sold.* Get the facts on the complete KOCH line today.

KOCH REFRIGERATORS

SINCE 1883 NORTH KANSAS CITY 16, MO.

SEND THIS COUPON *today* FOR FULL DETAILS

KOCH REFRIGERATORS
North Kansas City 16, Mo. RN 16

Please send me at once, without obligation, complete information on profit-making Koch display cases and refrigerators

Name.....

Address.....

City..... Zone..... State.....

WANTED NATIONAL SERVICE MANAGER

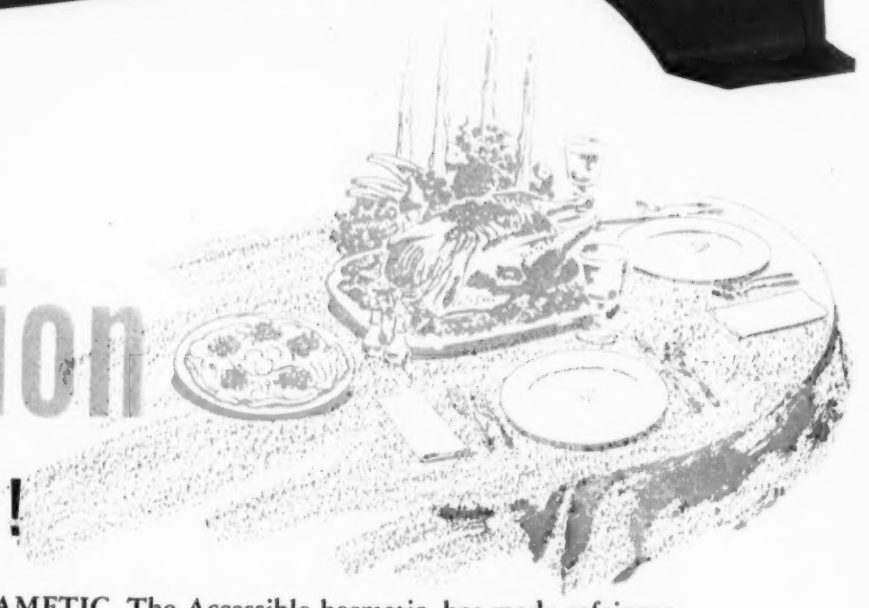
Top-name Manufacturer in room air conditioner industry and related refrigeration products has big-sized opportunity for a man truly capable of filling the shoes and getting the job done that goes with the title. We want a real executive that can induce cooperative effort and productively coordinate the varied activities in this important department. We want a man who can organize and supervise. We want an executive familiar with service requirements between the factory and its appliance distributors, dealers, and the product buying customer. Our company is well established, we're big, and still growing fast. Location is a large city in western New York. If you are a real candidate for this top executive responsibility running our Service Department, we'd like to have your application. What you tell us will be treated confidentially. **Reply Box 3870, Air Conditioning & Refrigeration News.**

What's behind a tradition?

Christmas cards were first used to extend season's greetings in Merrie Olde England in 1845. Now a multi-million dollar industry, Christmas cards today are as different from those early designs as a Copeland refrigeration unit differs from a cake of ice. Yet, in the same way Christmas cards maintain a treasured tradition, so does Copeland continue a tradition of quality, service and reliability.

the Copeland tradition

is behind every forward step!



More than thirty years ago Copeland tradition was born in a new era which heralded the coming of age of modern refrigeration. Copeland has continued to move forward with new developments in refrigeration engineering.

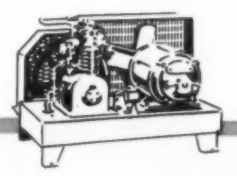
When Copeland engineers were called upon to meet and conquer the "service problem" of open-type refrigeration units they tackled the job with confidence. Success, experience and skill were the tools needed to meet this challenge . . . and Copeland had all these, plus!

COPELAMETIC, The Accessible hermetic, was developed by Copeland engineers to overcome the causes of 90% of the failures of open-type units. By eliminating belts, seals and manual oiling, Copeland produced a hermetic refrigeration unit that succeeded in the best Copeland tradition.

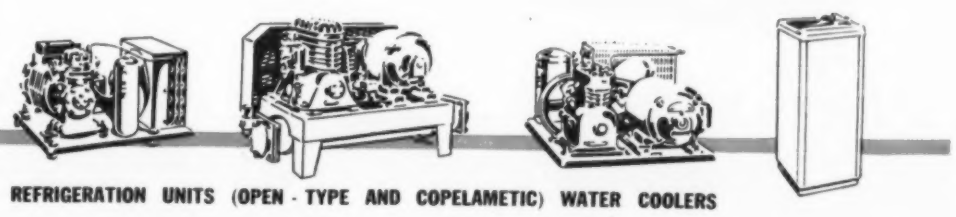
COPELAMETIC, The Accessible hermetic, has made refrigeration history because it has the typical Copeland extra-value. With 90% of the causes of servicing eliminated, engineering thought was given to the remaining 10%. Copeland engineers designed COPELAMETIC, The Accessible hermetic, so that if ever valve-plate adjustments or other servicing needs were required, the non-welded-in unit would be accessible for quick work done right in the field. With every part easy to get at, it is never necessary to send a COPELAMETIC back for factory repairs.

Practical, experienced engineering know-how is only part of the Copeland tradition. You get all the benefits of this fine tradition from the company which pioneered the refrigeration age and which continues to grow with you and for you.

Write today for copies of Copeland catalogs and data sheets.



Copeland
DEPENDABLE *Electric* REFRIGERATION



REFRIGERATION UNITS (OPEN-TYPE AND COPELAMETIC) WATER COOLERS

COPELAND REFRIGERATION CORPORATION · SIDNEY, OHIO

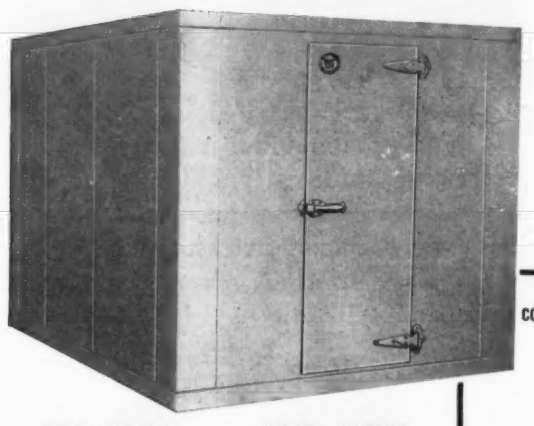
1951's BIG NEWS!!

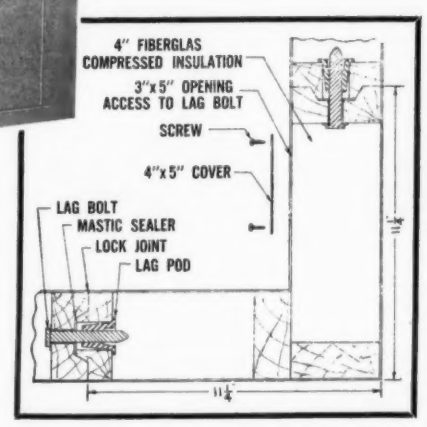
the all *NEW*

LA CROSSE

METAL

WALK-IN





IT'S HERE . . . AND NEW AS TOMORROW MORNING

This brand new beauty is another stride forward for LA CROSSE, THE LEADER—it's years ahead in design and engineering. Features interior construction of heavy galvanized steel, exterior of paint grip, zinc grip steel finished in gray baked enamel. Tongue in groove construction assures "LEAK PROOF" fit . . . steel lag screws and steel pads for "GRIP TIGHT" assembly and asphalt application for "SURE SEAL" joints and seams . . . 4" compressed Fiberglas insulation.

WRITE TODAY FOR MORE INFORMATION

LA CROSSE COOLER CO.

Factory and General Offices: 2801 LOSEY BLVD. S., LA CROSSE, WIS.

EXPORT OFFICE: 80 BROAD STREET, NEW YORK CITY

CABLE ADDRESS: EXIMPORT

C. L. Percival Co. Sold to John Stoddard; No Major Changes Seen

BOONE, IOWA—Stock of C. L. Percival Co. here, owned in major part by the heirs of the Percival estate, has been sold along with all assets to John Stoddard, president of both Iowa Machinery Supply Co. and Stoddard Machinery Co. of Des Moines, Iowa.

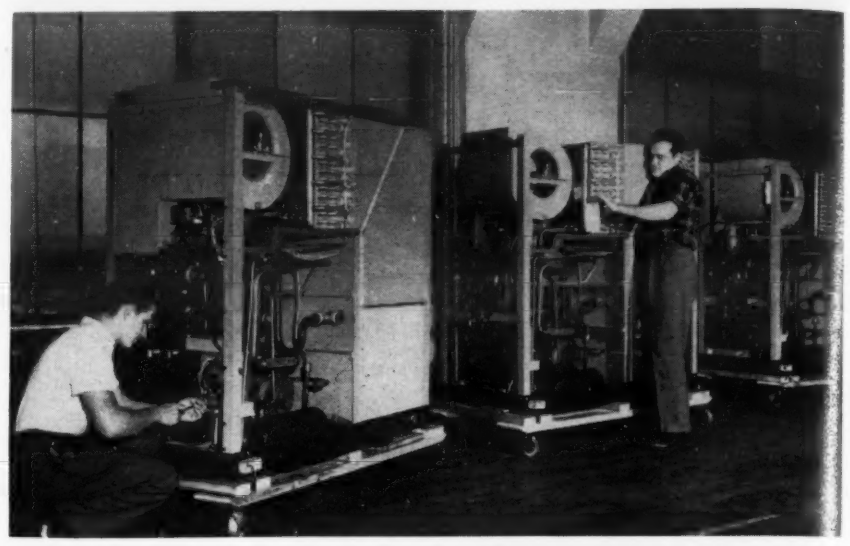
Members of the Percival family have not been in active management of their factory and sales operation since the death of the late W. H. Percival in 1942. Management of its entire organization has been in charge of A. J. Maas, vice president, who will continue to handle this function for the new owner.

Maas is one of the pioneering members of the C. L. Percival company, having been in their employ for 38 years. Before becoming active in managing, he had charge of the production as well as engineering operations.

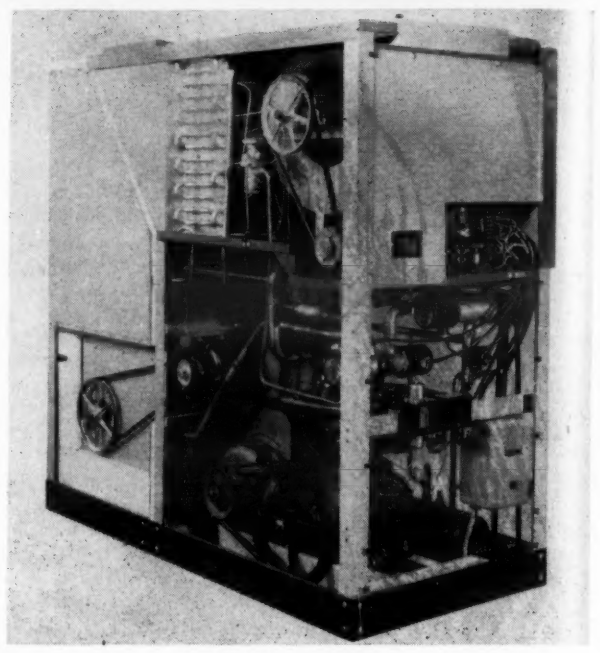
There will be no change in company personnel or operation, and no new personnel brought in.

Percival has been a pioneer in the commercial refrigeration fixture field, having been in business since 1886. It manufactures all types of refrigerator display cases, walk-in coolers, florist coolers, and is a jobber of butcher tool equipment and processing machinery.

The main office and factory is located in Boone. Operations were moved from Des Moines in 1941 into a new factory.



HEAT PUMP assembly line (above) shows production run of General Electric's new year-round unit.



WITHOUT HOUSING (right) is model YR-30, a 3-hp. unit.

let **KOLD-HOLD** show you

how plate stands give you faster pull-down at lower cost

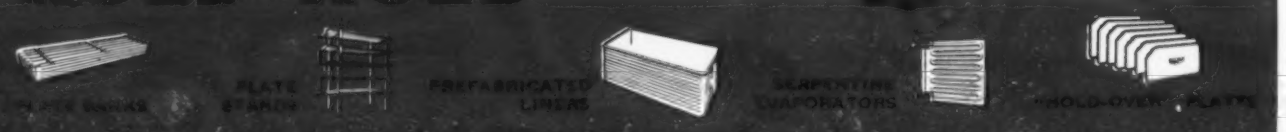
Notice how smooth the shelf tops are in these Kold-Hold Plate Stands. The refrigerant is directly beneath this smooth top. It flows in the channels formed by joining an embossed metal sheet to the flat metal sheet used for the shelf. This, of course, is the famous Kold-Hold "Serpentine" design which provides unrestricted refrigerant flow, greater pull-down capacity and the equivalent of 100% prime surface.

These Plate Stands provide additional storage space in an insulated cabinet or room. They not only refrigerate but also provide sharp-freezing facilities. The flat shelves permit direct, maximum contact with the product to be frozen. Thus they make possible faster pull-down at a lower operating cost.

As the shelves are perfectly flat on top, all types of products are easily and quickly placed on the stands. There are no crevices through which merchandise may fall, no uneven coils that make stacking difficult.

So why pay more for refrigeration when you get so much more convenience and so much faster pull-down using Kold-Hold Plate Stands. *Write today for full details.*

KOLD-HOLD *protects every step of the way*



KOLD-HOLD MANUFACTURING COMPANY 500 E. Hazel St. Lansing 4, Michigan

G-E Heat Pump--

(Concluded from Page 1, Column 2)

unit has been so constructed that it can be readily adapted for the type of diffusion grilles used on store-type package air conditioners, so that the G-E heat pump models can function in a conditioned space in the same manner that store conditioners do.

G-E is among the first of the manufacturers in the air conditioning business to get into production on heat pumps on a commercial scale.

In design, the G-E heat pump is a packaged unit of the air-to-air type, with duct connections to pick up the outside air supply. Provision has been made for the use of an external water booster heat source if such is necessary or desirable.

Electric resistance heater duct sections will be available as accessories for the heat pumps, for use in those sections of the country where supplementary heating will be required during a small portion of the heating season. These resistance heater sections will provide up to three stages of heating, and may be controlled, at the option of the purchaser, either individually in steps or as a single stage.

The package heat pump is very compact and has been proportioned so as to pass through any adequate stairway or through a 28-in. door. It is 27½ in. wide with side panels off, 62¼ in. long, and 59⅜ in. high.

Indoor duct connections are located on the top of the unit and the outdoor air connections are located at the rear of the unit.

Temperature control is accomplished by a low voltage heating-cooling thermostat. At specific thermostat settings, which the user can select, the thermostat will automatically either heat or cool as required by indoor conditions.

Automatic heating-to-cooling switch-over valves are said to be completely new in design, simple in operation, and use a minimum of electric power for their operation.

An automatic defrost cycle is another feature. When a certain amount of frost collects on the outside air coil, the system will automatically defrost itself for a predetermined length of time, and the defrost cycle will complete itself regardless of thermostat operation. The defrost cycle uses the residual heat stored in the refrigerant and the heat compression from the compressor.

A new G-E compressor incorporating a redesigned valve plate is used in the heat pump.

It is an air-cooled machine, designed for high capacity performance. Special load controls prevent overloading in the summer, provide more heat in the winter.

Insulated and sealed thermal barriers are provided to minimize heat leakage between sections. The outdoor air compartment is completely isolated thermally from the indoor air and compressor compartments by double metal carriers with vaporproof insulation between.

New waterproof polystyrene plastic insulation and aluminum-faced glass-wool are used to obtain maximum resistance to moisture, as well as for their excellent insulating properties. Thermal breaker strips are used to insulate the outdoor coil from the frame of the unit.

The package unit is so constructed as to take advantage of all possibilities to recover any heat losses from the machinery. By means of a damper and motor system which opens or closes an air passage between the compressor section and the indoor air compartment, compressor motor heat is recovered and utilized during the heating operation. The outdoor fan motor is located in the compressor compartment so that the heat dissipated from the motor can also be recovered.

Special provisions have been made to maintain low noise levels, through such measures as generously sized blowers, close compressor tolerances and compressor mounting on vibration suppressors. The entire enclosure is insulated with sound-absorbing insulation, all panels and baffles have been designed to avoid sounding-board effects, and fan bearings and fan motors are resiliently mounted to achieve the lowest possible noise level.

A high-pressure cut-out switch is provided in the refrigerant system.

Cooling capacity of the 3-hp. unit is 33,600 B.t.u. per hour at ASRE Standard Rating Conditions and heating capacity is 40,500 B.t.u. per hour with 45° F. outside air.

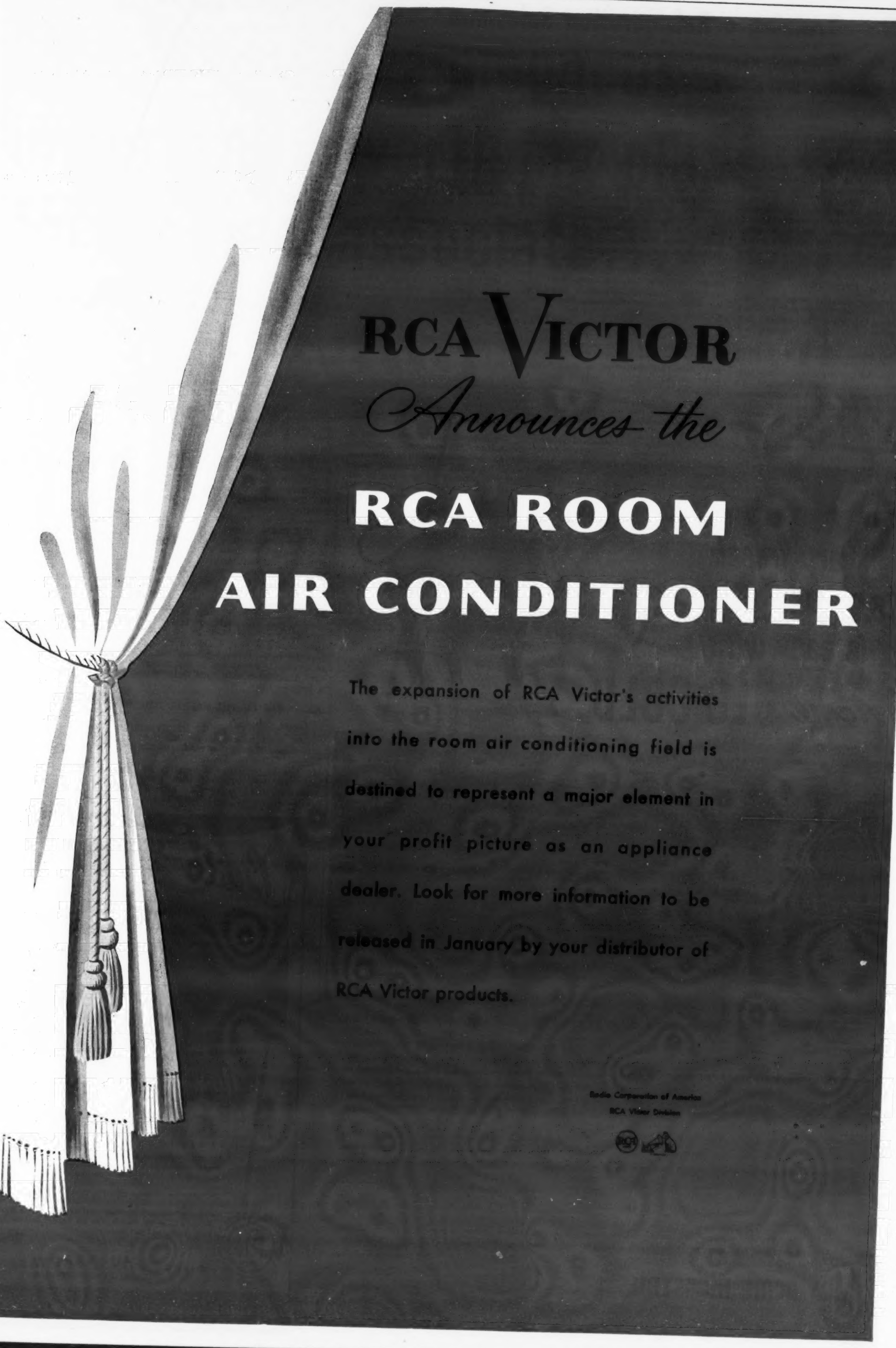
Units are available with compressor motors of either the single-phase or three-phase type.

Heat transfer surfaces feature aluminum fins with high swaged collars which effectively cover the copper tubing.

Detroit Assns. Meet Dec. 10

DETROIT — Henry Sleik, vice president of W. B. Connor Engineering Corp., will discuss "Odors, Their Nature, Cause, and Control" Dec. 10 at the Rackham Bldg. at a joint meeting of the local chapters of American Society of Refrigerating Engineers, American Society of Heating and Ventilating Engineers, and American Society of Mechanical Engineers.

Immediately following the dinner, which begins at 6 p.m., Madeline C. Dinu, nationally recognized authority on aviation law, will present some "Vignettes of an Aviation Lawyer."


RCA VICTOR
Announces the
RCA ROOM
AIR CONDITIONER
The expansion of RCA Victor's activities into the room air conditioning field is destined to represent a major element in your profit picture as an appliance dealer. Look for more information to be released in January by your distributor of RCA Victor products.
Radio Corporation of America
RCA Victor Division

Training a Refrigeration Salesman

Product Information, Knowledge of Others' Mistakes, and Chance To Ask Questions Will Give Energetic Trainee the Confidence He Needs

CHICAGO — "Through years of selecting, hiring, training, and paying salesmen, our company has found that the energetic man with the forceful character makes a good salesman. The men we have hired with little or no background of selling experience have made our best men."

So stated Paul Allen, president of the Paul Allen Refrigeration Co. of Little Rock, Ark., during a sales training panel at the annual convention of the National Commercial Refrigerator Sales Association here.

'Develop' Personality

"Someone familiar with the grocery, meat, or restaurant business may find this knowledge helpful, but the essential factors are energy and personality," Allen declared.

"The fellow with the quick smile and the quick step will not waste the time of the employer or the customer. He is welcome anywhere. We look for such qualities of enthusiasm in all our new men.

"A good course in personality development is one of the most basic preparations for selling."

Launching into a description of how his company trains its salesmen, Allen continued:

"The first step we take in the actual training program for the new salesman is the process of familiarizing him with the products he is going to sell. We acquaint the men with our catalogs—we handle only refrigeration and counter equipment —and then put him on the display floor for three weeks on straight salary.

"We let him study our display models and encourage him to ask questions. We give him a ruler and let him measure the equipment so that he becomes intimate with the finest details. We stress construction features to him and teach him that we handle only the best equipment. We want him to know all the details about the case because we don't want him fumbling through a catalog when the customer asks him a question.

"This process gives the salesman confidence in the equipment he is going to sell and in his own knowledge of that equipment. We teach him that the equipment is easy to sell, but that selling is not an easy job.

"Then we take him out into the field and show him the equipment in operation, handling large amounts of merchandise. This gives him confidence that the equipment will do the job he says it will do. We take him to both large installations and the small ones, introducing him to the customers and letting him hear their comments on the cases.

"We make him remember the users' stories and their names so that he can bring his prospects to them later.

"We again encourage him to ask questions of us and of the customer. We try to satisfy all his problems concerning mechanical operation and the installation of the fixtures he will sell.

Review Firm's Record, Mistakes

"Then we show him all the records which actually reveal the need of the grocer and other businessmen for our product and show how it can benefit them. We tell him all we know about the type of people he will be dealing with and what problems they face.

"We relate to him our past experiences with satisfied and dissatisfied customers, and we tell him the mistakes we have all made and how they can be avoided.

"We explain to him that the more he puts into his work, the more satisfaction and money he will get out of it. At no time do we let him get the idea that he will be anything but the best salesman we have.

"The biggest selling job is that of the trainer. He must sell the product to the salesman. The salesman must have the indestructible belief that the product he is going to sell is the best and only the best. We tell him about the methods employed in the manufacture of the product.

How To Maintain Interest

"We try to give him complete faith in the perfection of the product. We think this selling of the product to the salesman gives him a fundamental starting point for his future sales. I often hear one of our salesmen on the floor using some of the same phrasing I have told to him, adding his own ideas, of course."

When all this preparation has been completed, then Allen sends the salesman out on the road. The first day is usually quite an eye-opener for the salesman who, bumping up against the realities of selling, finds out just how little he actually knows about the job.

When he comes back to the store discouraged, then Allen reviews his experiences with him and even goes out with him and shows him how to close a sale.

"The training of new salesmen is never over," Allen declared. "We find it important to keep up the interest of our oldest salesmen. We take them to factory sales meetings when possible, and even to visit the factory itself.

Informal Sales, Pep Meetings

"We have our own informal sales meetings and pep meetings, which might occur in my office or in a restaurant over a cup of coffee. We shun all types of formality regarding our salesmen, since it is our belief that a too formal salesman loses familiarity with the prospect.

"We swap ideas and find that a good heated argument every once in a while will keep a salesman from becoming rusty. We all look forward to the Saturday morning get-togethers when we relate the week's experiences on the road.

"If I find a salesman in a slump, I do not consider it a waste of time to go out on the road with him and give him my help, or double him up with a salesman who is having a winning streak.

"It is very important to be encouraging and give them the impression that you have faith in them, even if you are doubting. If I find one of my salesmen is having a hard time closing a deal, I always volunteer to help—without pulling rank, of course. I always try to remember that a salesman will work better for a boss he likes.

Keep Men Equipped with Good Catalogs

"We don't believe in sending our salesmen out on the road empty-handed," Allen continued. "One of the big jobs in our office is keeping the salesman well equipped with good catalogs and simplified pricing.

"A new salesman needs the most help since he will already be ill at ease calling on prospects. We make sure that he has a simplified and easy-to-read price sheet, kept well up-to-date, arranged by our methods.

"Manufacturers' price lists are often too complicated for even the district managers to interpret, so we use our own pricing system, consolidating all lines of equipment."

Allen remarked that he likes to use small town newspapers to advertise his wares. The advertisements are usually of installations recently sold, telling all the merchants in that territory that the Allen salesman (giving his name) has sold another case to a local firm.

Straight Salary for Beginners

Allen said that he first puts a salesman on straight salary for six weeks. Then he goes on a straight 10% commission. "The salesman always knows exactly how much he is going to get for his work," Allen said.

During a question and answer period following his talk, Allen gave the following additional information:

Q.—How long does the average salesman stay with your company?

A.—About two years. Most of them wind up in business for themselves or transfer to some other line of endeavor. One man has been with me for six years.

Q.—How long do you go along with a man before letting him go if he doesn't produce?

A.—About three months.

Q.—How do you teach the technical theory of refrigeration to men who walk in off the street? I don't feel that a man can be a good salesman unless he has some technical knowledge of refrigeration.

A.—We avoid technicalities. We just teach them how to sell. The customer doesn't know any more, or as much, about refrigeration than the salesman, anyway.

Q.—How do you handle trade-ins?

A.—The salesman gets 10% of the net sale, which is less whatever was allowed for the old merchandise. We have a built-in 20% in the price, which we will give for anything the customer has. But if the salesman goes over that, he suffers. When the salesman resells the turned-in equipment, he gets 10% of that, too.

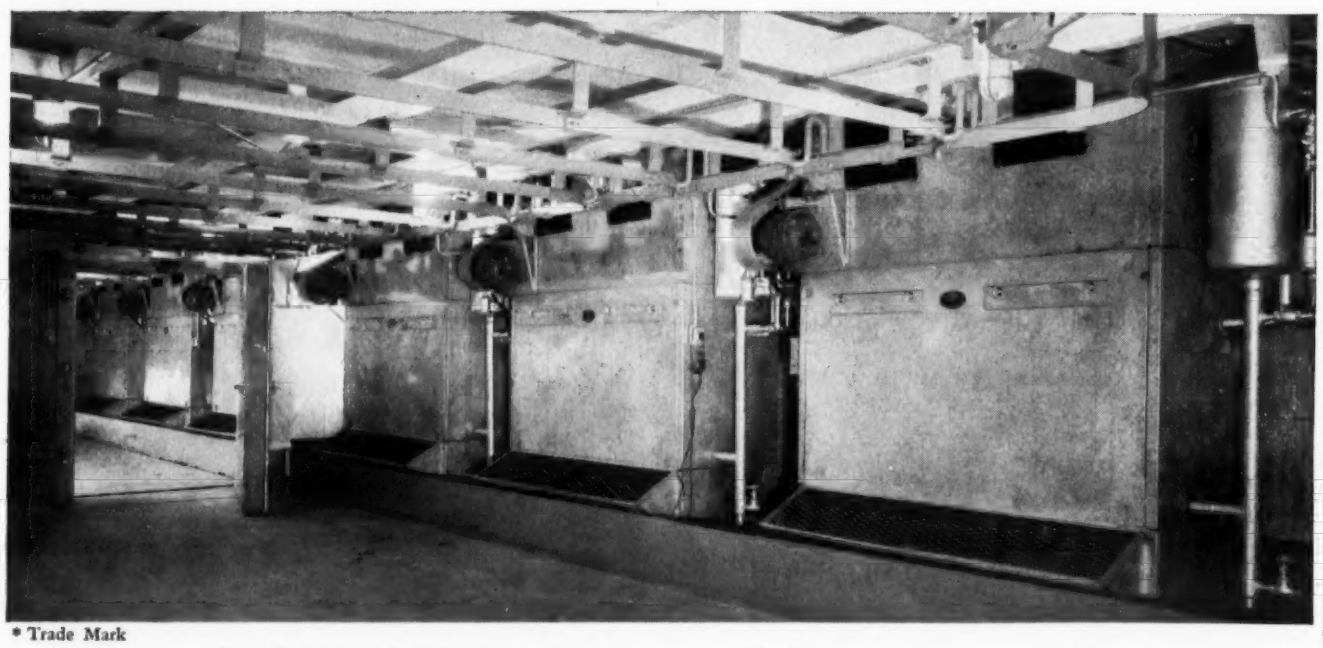
Q.—What is the basis of this 20%?

A.—It is 20% of the list price. We consider list to be double the cost of the equipment in Little Rock.

Q.—Do the salesmen know the cost of the merchandise?

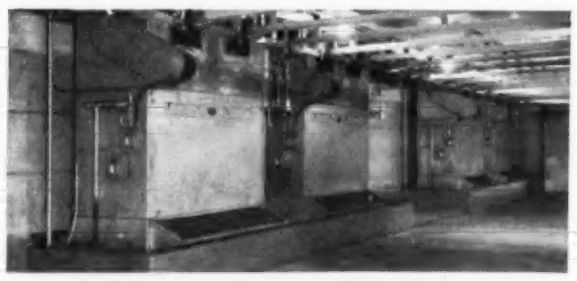
A.—Our salesmen know the cost of the merchandise and also our overhead. We tell him all our costs and even acquaint him with the NCRSA figures on the cost of doing business.

Sharp freezing 28,800 lbs. of beef is easy with Acme BLO-COLD*



* Trade Mark

Sharp-freezing and storing more than 605 quarters of beef every 36 hours was the problem for the James Allan & Sons Plant in San Francisco. After slaughtering, the beef is frozen in two preliminary handling rooms, which are kept at −15° F. These two rooms hold about 280 quarters of beef. After this preliminary freezing the beef goes into the "holding freezer" where 325 quarters of beef are kept in stock for delivery at temperature of "0° F." The entire freezing installation consists of ten *ACME* Blo-Cold Units, three in each of the preliminary freezing rooms—four in the "holding freezer". The James Allan & Sons Company is the largest Packer in the San Francisco area and their Plant is the only one that can deliver this large quantity of beef—about 28,800 lbs. frozen at −15° and kept at "0° F." for delivery. Other Companies "cool" but do not freeze.



The Engineers for the James Allan & Sons Company, selected *ACME* Blo-Cold Units on the basis of comparative data, because of their simple installation and low-cost, dependable operation.

The versatility of the *ACME* Blo-Cold Unit makes it adaptable to a variety of applications. *ACME* Engineers will gladly cooperate in finding a low-cost solution to your Refrigeration problem. Write today—without obligation.

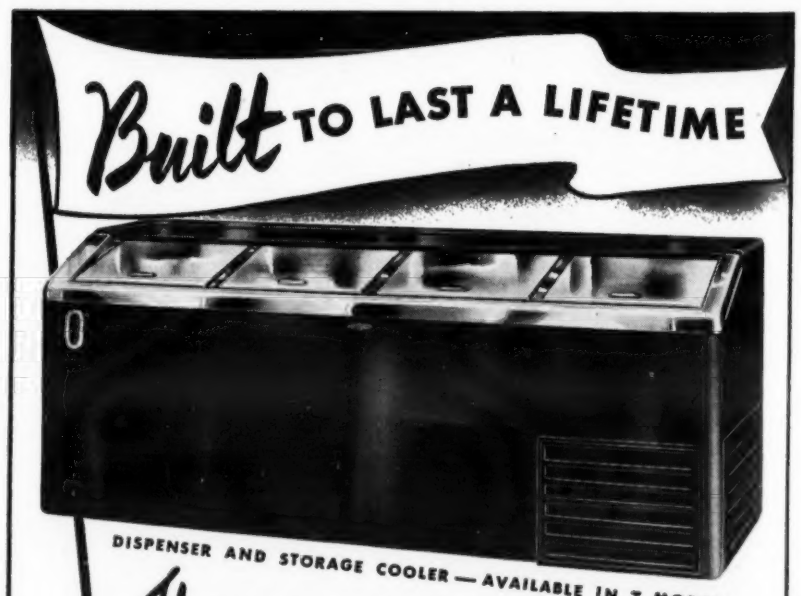
ACME PRODUCTS

ACME INDUSTRIES, INC., JACKSON, MICHIGAN, U.S.A.

Air Conditioning and Refrigeration Division

CONTINUOUSLY SERVING THE AIR CONDITIONING AND REFRIGERATION INDUSTRY SINCE 1919

Built TO LAST A LIFETIME



DISPENSER AND STORAGE COOLER — AVAILABLE IN 7 MODELS

The FAMOUS P-H DRY BEVERAGE COOLERS

CHOICE OF PORCELAIN OR STAINLESS STEEL EXTERIORS

For fast, economical, uniform cooling you can't beat the new P-H Dry Beverage Cooler. In over 20 years of field testing the patented P-H forced updraft cooling system has been proved superior to any other type. Actually built to last a "Lifetime" the exteriors of these attractive streamlined coolers are finished in black porcelain with stainless steel working surfaces . . . also available with stainless steel exteriors. Your choice of 50", 6', 8' or 10' models with bar tops if desired . . . both remote and self contained.

THE MARK OF A GOOD CASE — THE P-H LINE — ESTABLISHED 1898

SEE YOUR NEAREST P-H DEALER . . . OR Write —

PUFFER-HUBBARD MFG. CO.
GRAND HAVEN, MICHIGAN

REACH-IN, PASS-THRU and FLORIST CABINETS — DOUGH RETARDERS — DAIRY-DELICATESSEN AND DISPLAY CASES — WALK-IN COOLERS

IT&T announces important advertising plans for its new associate...

Coolerator

In December, International Telephone and Telegraph Corporation is launching its powerful advertising program on behalf of its new associate, the long-established Coolerator Company. This is only the beginning and only one phase of what the association of these two organizations can mean in the appliance field.

Now behind Coolerator are all the world-wide resources, the financial strength, the extensive research and manufacturing facilities of IT&T. Further plans for Coolerator include a new and even finer line of refrigerators, ranges and freezers for 1952 . . . plant expansion and modernization . . . increased promotion and merchandising activities. The Coolerator dealer franchise is now more valuable than ever.

For full details on Coolerator appliances, see your local Coolerator distributor or write to The Coolerator Company, Duluth 1, Minn. Ask about a Coolerator franchise.

First advertisement in a program to appear in December in these magazines with a total circulation of 24,862,872.

Full color in

Saturday Evening Post—Dec. 1 McCall's
Ladies' Home Journal Better Homes & Gardens
Good Housekeeping Farm Journal

Black & White in

Time—Dec. 3 Newsweek—Dec. 10
U. S. News & World Report—Dec. 14

IT&T

INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION
67 Broad Street, New York, N. Y.

And now
IT&T
suggests the finest of Gifts—
AN ELECTRIC RANGE BY
Coolerator
Here is truly automatic cooking—
Yes, a remarkable double-oven electric range with 5 Way Automatic Control is brought to you by International Telephone and Telegraph Corporation through its newest associate . . . the long-established Coolerator Company. Check all the fine features of this double-oven range—the extra insulation for cooler kitchens, the gleaming lifetime titanium porcelain finish, the flash speed of the high heat, the 7 Heat Push-A-Button Color Guide Cooking. This is just one of a complete line of Coolerator ranges.
refrigerators and freezers, all with unusual quality features. Look for more interesting developments—to make homes brighter and work lighter—from the combined knowledge and skills of these two great names. Get acquainted with your Coolerator dealer now!
The DOUBLE-OVEN RANGE that brings you 5 Way Automatic Control. The Electric Timer Clock and Select-O-Switch give you full automatic control of 1. the king-size right-hand oven—2. the economy size left-hand oven—3. the Magic Well-E-Vator deep well cooker—4. giant 2100 watt surface unit—5. the Handy Appliance Outlet.
COOLERATOR FREEZER stores 450 pounds of food in cabinet only 55 inches wide. Stores more food in less space! Super-refrigerated compartment goes down to 10 below zero for really fast freezing.
COOLERATOR REFRIGERATORS hold more food—take less space. Exclusive Motor-on-the-Back design gives you all safe cold, top to base—uses far less space. The new 10.4 cu. ft. Coolerator fits in the space of your old "8."
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION • 67 Broad Street, New York, N. Y.
For full information on Coolerator appliances, write to Coolerator Company, Duluth 1, Minn.
Guaranteed by Good Housekeeping

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

"Whew!" whistled the shopper. "For that much dough, I wouldn't buy MAYBE. I'd want a sure thing."

Timidly a shy girl looked longingly at a display of perfumes named "Surrender," "One Night of Love," "Passion," "All of Me," etc.

Meekly she asked, "Do you have anything for a beginner?"

Personnel Problem

"Had any experience?" burped the office manager.

"Oh, boy, I'll say," a cute-girl applicant for the job honested. "And some of them experiences were wonderful!"

He hired her. "Admired her candor," he justified on his quadruplicate report.

Higher Education

Gossiping over the back fence Mrs. Mefoofscovitch murmured to Mrs. O'Leary (while they hung out the week's washing):

"I see the doctor come to your house last night."

"Yes, my daughter, Dolores, gave us a fine son."

"O-oo, that's wonderful," cooed Mrs. Mefoofscovitch. "And what did she name him?"

"She calls him Diploma, because she brought him home from college."

Forgive us, please, if that reminds us of this ultra-corny gag:

Teacher: "Tim, please use the word 'diploma' in a sentence."

Tim: "Ve call diploma ven de vash basin overflows."

Realism vs. Poetry

Reclassifying books in the Grosse Pointe (Mich.) library, a Vassar graduate came across an annotated volume of Dorothy Parker's early verses.

A marginal notation had been inscribed alongside Miss Parker's notorious crack, "Men seldom make passes at girls who wear glasses."

"Brotherr," the book-borrower had scrawled, "she hasn't been *around*."

She's Still Single

Waiting for a traffic light to change, an attractive young woman stood quietly on a street corner. From nowhere a snappy convertible drew up beside her and its male occupant sang out, "Hey, cutie, I'm driving South. Hop in."

"Really?" she scathed. "Bring me a magnolia blossom and a crate of oranges when you return."

He drove on. And she awaits crowded busses now and, probably, forevermore.

Often They're Lonely

Prime hazard of being on a night shift in a precinct police station: The cops get a lot of screwy calls from lonely females who imagine there's a burglar under their piazza, or that the dame across the hall is goin' to start sumpin' any minute.

Few of the latter are so honest as the woman who sweet-talked, upon getting the customary phone growling from Sergeant X:

"Thank you so much, officer. Now that I've heard a man's voice, maybe I can get to sleep."

Credit Where Credit Is Due

Bookseller Carl Kroch of Chicago avers that two young matrons paused before a big window display of a humorous volume entitled, *How To Torture Your Husband.*

"That's not for me," he overheard one say. "I got ways of my own."

Young Mrs. Dithers wasn't happy about her husband's failure to take charge of the baby, and took her woes to her own mother.

"Tell me just one thing," she bridled. "Who got up to feed *me* my formula when I cried at midnight?"

"It wasn't your father, you can be sure. In my time we didn't *have* bottles."

How Can You Satisfy Them?

'Twas a brand new automobile Mrs. Nonesuch won in the annual Fireman's Field Day lottery. Even before the Income Tax Man came around, however, Mrs. Nonesuch griped.

"Why," she moaned, "did I buy that other ticket?"

Expensive Education

An opulent New Yorker hated the entire female species.

While vacationing in Tennessee one summer, he met and fell in love with a barefoot mountain lass. He wooed her, hypnotized her completely, and asked her to marry him.

Prior to the wedding, he sent his socially illiterate bride-to-be away to a "finishing school," in the hope that she could acquire the graces he deemed necessary before she could assume her proper position as his wife. By the time she was graduated, the New Yorker met a new blonde, and reneged on the marriage deal with his "Daisy Mae."

The jilted young woman (proving that her schooling had taught her a few things) promptly instituted suit for breach-of-promise. And she won a handsome settlement.

"It wasn't the breach-of-promise settlement that I resented so much," explained the New Yorker, later, "but there was an additional judgment that really burned me up."

"Wha hoppen?" wondered Sherman Billingsley, his pal.

"The $5,000 I had to pay her," groaned the Manhattanite, "for 'loss of time while improving her mind.'"

And Who's Wrong?

"I've had a great deal of experience with women," confided a novelist with many best-sellers to his credit. "I don't understand them myself; but I have learned one thing. You can't trust a brown-eyed woman."

Dopey Doakes thought this over for a few minutes, and then dashed home. He remembered that he didn't know the color of his wife's eyes. Upon arrival he found his wife in bed. He switched on the light, pried open her eyes, took a good look, and shouted:

"Brown, dammit."

Whereupon an old friend and neighbor wearily opened a closet door.

"How'd you guess I was here?" growled Brown.

Who's Where?

'Twas a lively party which the veddy "social" hostess threw in her palatial home. Along about 3 a.m. she stumbled over to the comfortable chair where her husband was relapsed and relaxed.

"Look, dahling," she hiccupped, "it's been a lovely pahty, but don't you rahlly think we should be going home soon?"

Women Are Ageless

Bertha Blurt boasted about her ability to keep a secret. "Why, I haven't told anyone my age since I was 28," she giggled.

"I'll bet," kidded one of the men, "you'll let it slip sometime. May I get you another drink?" (Already Miss Blurt had downed four Martinis.)

"Heh, heh," Bertha cackled, "I've kept that secret for six years already, and I ain't gonna spill it now."

'The Road to Hell Is Paved With Good Intentions'

Three days after she had completed a Red Cross course in first aid, Mrs. Zeal saw a man lying flat on his stomach in a well-traveled street.

"Oh, that poor man," she cried. Rushing over to revive him, she administered artificial respiration.

To her dismay, he was annoyed by this unwanted attention.

"Look, lady," he groaned, "putting this here wire down that there manhole is hard work—and you sure ain't making it any easier."

They Have Their Own Standards

Two women on a bus were conversing in that intimate manner which women who never expect to see each other again indulge.

"Heavens to Betsy!" exclaimed Woman No. 1. "I forgot to pay my fare. I'd better pay it right away!"

"I wouldn't if I were you," nudged her new-found friend. "No one noticed."

"Oh, yes," insisted the first woman, "I'm going to pay up." So the righteous woman pushed to the front of the bus, inserted a coin in the box, returned to her seat, and laughed heartily.

"That proves that honesty always pays," she trumpeted. "I gave the driver a quarter, and he handed me a fifty-cent piece in change."

Privileged Attire

Entering a streetcar with an overgrown boy, Mrs. Bilgebotham tried to get by with a half-fare ticket for her hefty son.

"Full fare for this young man," snapped the conductor.

"How can you tell he's too old for a half-fare ticket?"

"Short pants, half fare; long pants, full fare—that's my rule."

"Goodie," smirked the shorts-attired woman. "Then *I* can get on for half fare."

Immediately behind her was a gal wearing a halter outfit. She shouted: "Praise de Lawd. Dis ride won't cost me nuffin'."

Words Fail Us

Waddling into an exclusive pet shop, a well-to-do widow pronounced: "I want to buy a winter coat for my little Fifi."

"What size coat does your dog take?" accommodated a saleswoman.

"Oh, there you have me. I really don't know," confessed the dowager.

"Well, bring your pet in here so we can measure her."

"Oh, no," objected the pet-lover. "I couldn't do that. I want to surprise Fifi. It's her third birthday, y'know."

You Tell Us Why

Every long-suffering husband will appreciate this anecdote about a millinery saleslady who emerged from the stockroom. Carrying an odd-appearing concoction in the hollow of her hand, she whistled and whinnied.

"Here, Ma'am," she explained to a prospective customer, "is a little hat which definitely will not become outmoded. Five years from now, it will look just as ridiculous as it does today."

P.S.: The lady bought it.

Check these "Extra Value" Features of the KEROTEST Forged Brass GLOBE VALVE

1. FULL FLOW—unrestricted interior design assures maximum volume and pressure performance.
2. SELF-ADJUSTING—abrasion and forced seating eliminated by self-compensating "floating" disc.
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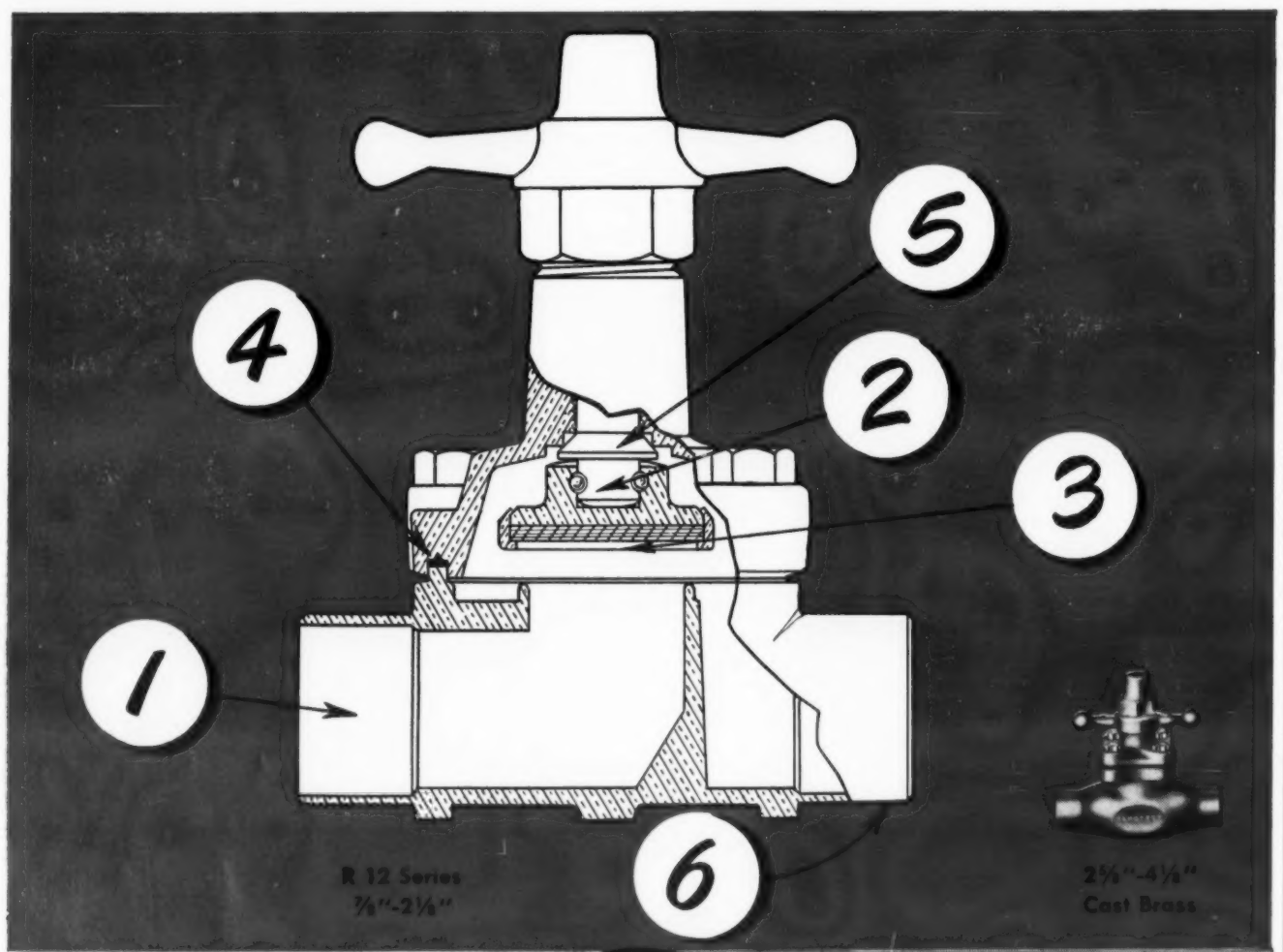
4. LEAK-LOK BONNET SEAL—exclusive Kerotest gasketing practice assures leak-proof bonnet joint.
5. REPACKS IN USE—positive back-seating permits repacking under full pressure with safety.
6. TEMPERATURE-PROOF—solid forged brass body withstands high temperature soldering—never develops porosity.



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- Tailor-made Rooms for any required temperature, of any desired size.

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MANUFACTURERS OF THE FAMOUS VICTOR QUICKFREEZE

PRODUCTS CORPORATION • HAGERSTOWN, MD.

Student Salesmen—for a Day

Sales, Publicity, Store Traffic, and Prospective Employes Produced by Unusual Promotion

BILLINGS, Mont. — C. C. Musburger focused widespread public attention on his Appliance Mart here by staging a promotion in which high school students became "salesmen for a day" and vied for prizes. And he may well have lined up some future employes in the process.

News of the promotion was sent to local high schools. Boys interested in the plan were invited to so notify the store. A dozen boys responded.

The students then attended two afternoon training classes, each being assigned to a regular store salesman. They were instructed in such fundamentals as prospect approach, conducting a demonstration, closing the sale, and maintaining interest.

Prizes offered included a $50 savings bond for the top salesman, a $25 bond for the second, and other awards. The day before the youthful salesmen took the floor, a half-page newspaper advertisement was run, explaining the entire promotion and inviting the Billings public to visit the store.

Results were so outstanding, according to Musburger, that he has decided to make this an annual promotion, increasing the number of high school youths concerned each year. An all-time record number of visitors—many of them relatives and friends of the students, visited the Appliance Mart.

We decided at first that our regular salesmen would handle all closings," Musburger said. "But it turned out that some of the youngsters were able to conduct this end of the sale with no trouble. The top prize winner sold a complete automatic home laundry to the first prospect whom he contacted, while two more were equally successful with radio-phonograph combinations, electric ranges, and home freezers."

The stunt attracted the attention of the local newspaper, which sent a photographer around to catch the novice salesmen on the job. Considerable editorial space was devoted to the promotion on the day it was run.

As a result of the promotion, The Appliance Mart made many new friends. And, said Musburger: "I am certain that at least half of the boys who have spent a day in the store in this way will later become permanent employes."

Jamison Opens Branch Office In Omaha, Neb.

HAGERSTOWN, Md. — Jamison Cold Storage Door Co. here has announced the opening of a direct factory branch in Omaha.

This office will service the requirements of Jamison customers in the states of Nebraska and South Dakota, as well as those located in Iowa, west of and including Des Moines.

The office will be in charge of A. C. Hoffbauer, who has been part of the Jamison sales organization for some years. He has had extensive field experience.

'Antique Hunt' Brings Appliance Store Many Customers, Valuables

ASBURY PARK, N. J.—It took an antique collector to think up this promotion, but it proved to be far from a musty idea.

Murray C. Conners, president of Atlantic Appliance Co., is the antique collector. He was looking for an idea that would make his fourth anniversary in the appliance business memorable for patrons of his six stores. The stores are located in communities in Monmouth and Ocean counties.

He found a solution in an "antique hunt," in which the public was invited to participate, with no strings attached. They were to bring anything "old" they owned to one of his stores. For the most interesting items brought in, Conners offered 243 merchandise prizes valued at $10,000. Top prize was $1,000 in merchandise.

More than 1,200 persons responded to the promotion and brought their antiques to the stores. These were displayed in the store windows during the anniversary event.

The displays, Conners commented, attracted many shoppers.

Conners secured professional help in authenticating the antiques.

Some of the more interesting items collected were a statuette from an Egyptian tomb dated at about 40 B.C., a newspaper announcing the death of George Washington, a candle flashlight, a copy of the Declaration of Independence said to be the second one.

Hamilton Mfg. Raises Prices on 3 Models of Clothes Driers

TWO RIVERS, Wis. — Price increases on its clothes driers have been put into effect by Hamilton Mfg. Co. here as a result of the new manufacturers' excise tax.

Model 960E was raised in price from $249.50 to $274.45, model 1025G from $269.50 to $296.45, and model 1125G (automatic ignition) from $289.50 to $318.45.

Processing Plant May Aid Freezer Owners, Dealers

HOLLAND, Mich.—Home freezer owners hereabouts, and dealers too, are expected to benefit from the new Montello Park processing plant which Gerritt Ritsema has established to provide a complete freezing and processing service in addition to curing and smoking pork products.

Besides the processing, the new plant will retail beef quarters and whole or half hogs to home freezer owners "at wholesale prices," prospective customers were promised by the owner.

Ritsema will also handle a complete line of freezer containers, wrapping paper, poultry bags, etc., to meet other needs of home freezer users, he announced during the two-day grand opening at which he offered visitors free coffee and doughnuts.

The refrigeration installation for the plant was put in by Conrad Refrigeration, Chrysler Airtemp dealer in Holland, using Airtemp units and forced convection coils.

There are two separate systems. One handles a low temperature room for quick freezing of meats and other foods. This is refrigerated by a "Freon-22" system. The chill room is cooled by a "Freon-12" system.

Hot gas defrosting is employed on the coils, being controlled automatically by a Penn time control valve, explains C. Conrad, head of the refrigeration firm. No manual attention is required. Heat for defrosting, Conrad adds, is obtained through a large fin section in the suction line.

Suggestion Lists May Boost Xmas Gift Sales

BIRMINGHAM, Ala. — Appliance dealers will find that their Christmas gift sales volume will increase sharply if the dealer is "specific" in making up gift suggestion lists, according to W. A. Hanlin, head of Birmingham Appliance Co. here.

Instead of leaving it up to the customer to recognize gift items under promotion, and to figure out for themselves what to give to men and women relatives, the dealer will profit through selecting two dozen or more suggested gifts, and proffering them on Christmas signs, in his windows, Hanlin avers.

"There are several ways of being specific," he indicated, "such as making up 'For Him' and 'For Her' signs, hang one in each window, or, as we did it last year, by selecting some 25 gift suggestions, and displaying them on a sign under the heading 'For a Merry Christmas!'.

"Such signs have the advantage of helping either men or women who are a bit hesitant about what to buy, or unfamiliar with the retailer's merchandise, to make a selection while standing on the sidewalk outside the store.

"Naturally, it is best to put at least one sample of each item suggested on the list in the window display, where the interested passerby will search it out, after reading the sign."

Attributes success to quality-built Frigidaire products!

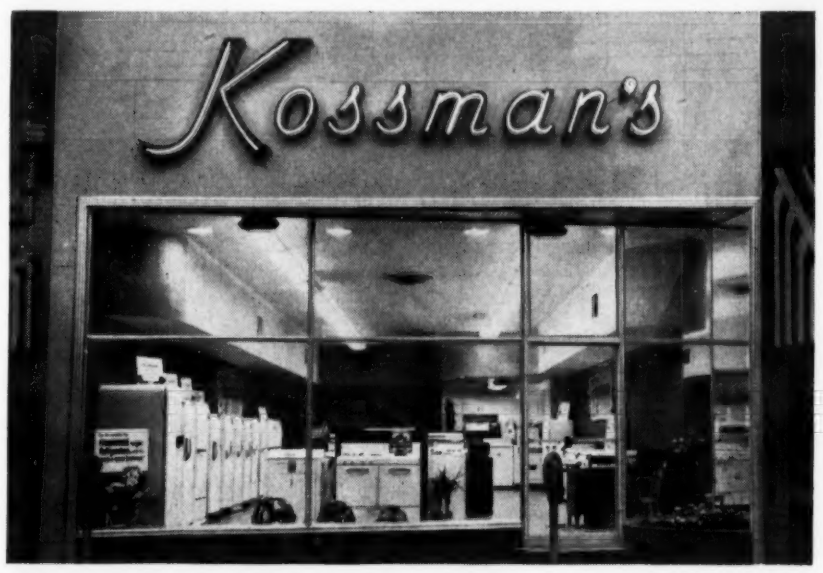
In just ten short years, Ed Kossman has built what started as a "side line" operation to a business with an annual commercial and air conditioning volume of hundreds of thousands of dollars.

And the value Ed Kossman places on his Frigidaire franchise is best exemplified by the following excerpt from his letter: "I feel that to a very great extent my success can be attributed to the quality-built products bearing the Frigidaire name which I sell. I am convinced that a very great majority of my sales come from satisfied users—and satisfied users can best be obtained when a dealer sells a top-quality product. In addition, Frigidaire's constant sales guidance has been a major factor contributing to my success."

FRIGIDAIRE

Over 400 Frigidaire refrigeration and air conditioning products—most complete line in the industry

Owner Ed Kossman, and his store manager, M. S. Pemberton, are pictured here in one corner of their showroom which is devoted expressly to Frigidaire commercial refrigeration and air conditioning products.



A far cry from the "few square feet of borrowed space" in which Ed Kossman started, is this up-to-the-minute Frigidaire showroom adequately staffed to handle all the commercial refrigeration and air conditioning in town.

Ed Kossman and his full-time staff of sales and service personnel watch a Frigidaire sales promotion film in their beautifully appointed sales office in Cleveland, Mississippi.

Charles "Curley" Joel, starts his day for Kossman's with a 15-minute radio program at 7:45 A. M. Then he packs away his guitar and goes about his work as a service man for the company.

Working Capital—Wholesaler's Problem

Schellenberg Tells How Close Control of Receivables and Inventories Is Important to Profitable Operation, Growth

One of the best-received papers presented at the various association meetings held in Chicago during the period of the All-Industry Show was the one on "Problems Confronting Wholesalers at the Present Time," presented before REWA by A. B. "Art" Schellenberg.

This discussion covered such matters as ways to increase working capital (through better control of past due receivables), proper balance and turnover of inventories, and the small businessman's responsibility in the matter of fighting confiscatory taxation. Schellenberg, a former president of Refrigeration Equipment Manufacturers Association, is now a partner in United Refrigeration Co., refrigeration supplies wholesaling firm.

By Arthur B. Schellenberg

Some of you may have seen the recent cartoon of the workman just home from the job, his lunch box on the floor, hanging up his coat while his wife, who has just opened his pay envelope, comments: "Unemployment insurance, health insurance, social security, pension fund—we got security Herman, but what do we do for groceries?"

Many a small businessman, the refrigeration wholesaler among them, is in very much the same kind of a spot. On paper many of you are fairly wealthy men. On paper you are making money and each year is better than the previous one.

However, on a cash basis it's an entirely different story. You are finding it increasingly necessary to live relatively frugally and spend close to your belt if you want to avoid drawing on your savings. When asked by your wife, like the woman in the cartoon, "what do we use for groceries?" about all you can say is: "But look at the estate we are building." and show her those figures on paper.

Most of you have enjoyed an increase in business over the past several years and your companies are growing and expanding. That means increased inventories, increased open account sales, new and larger buildings and more equipment—in other words, more money invested in the business. High taxes on profits which must be paid almost as soon as the profits are made and in *cash,* together with the present inflation are proving a serious drain on working capital. There was a time when a man could re-invest his savings in his own growing business without retarding a commensurate rise in his own living standard.

If your business is about the same as the average refrigeration wholesaler's, last year your sales increased 21%. To handle this increase in your sales you had to increase the amount of working capital by six times the profit you made on that sales increase. The average figures indicate that, exclusive of salaries drawn, almost all the profit you made last year had to be plowed back into the business to accommodate the sales increase.

It is obvious that running a growing business in the face of inflation and high taxes requires ever increasing working capital and presents a real cash income problem for the small businessman. Large companies receive government loans and advanced payments of one sort or another that help them meet their tax cash requirements.

Small, Growing Business Needs Working Capital

Large corporations can raise working capital in a number of ways not readily available to small business firms. This is probably as it should be—remember, we can't make the little fellow taller by cutting off the big fellow's legs. Be that as it may, the small, growing business must raise what new working capital it can and, most important, must get the most out of its current working capital.

This discussion is limited to two major facets of our problem as successful small businessmen—working capital and taxes. I am assuming, of course, that you are all operating your businesses at a fair profit. If you are operating at a loss—you have no tax problem and a solution to your working capital problem will be very temporary and costly to you and others. You may not be making as much profit as you should be—but that is another subject for another time.

Working Capital Analyzed

Let's take a look at the working capital problem. What is Working Capital or Invested Capital? It is the total of your Inventory, Accounts Receivable, Cash, Fixed Assets—that is your building, if you own one, equipment, etc.—and those Miscellaneous items such as deposits, advances to employes and the like.

Now all of this invested capital is not yours or your stockholders' or partners'. The outside capital in your business consists of your Accounts Payable and money you have borrowed from banks or other sources. The difference between the total invested capital and this outside capital is what you and the owners of your company have tied up in the business.

The amount of outside capital usually available for use in your business is relatively limited. You can't expect your suppliers to carry you for long—chances are many of them also have a working capital problem. I'm sure that few of you any longer have that old fashioned fear and awe of banks and that it isn't necessary to dwell on the desirability of establishing a good honest, facts-on-the-table business relationship with a good bank.

Under the current situation we must get the most out of our working capital, for every dollar that we do not actually require tied up in our business is a dollar available for living cash. Now, of course, it is obvious that one way to get more income is to increase sales and profits—but bear in mind the working capital problem and more particularly the cash problem rides right on up proportionately with the increase in sales and taxes due disproportionately with increased profits.

Excess Capital Tied Up

How can we get the most out of working capital? Most of the capital tied up in our wholesale business is in accounts receivable and inventory. What do your past due accounts average every month? Determine the monthly average of your accounts receivable and of your open account sales—the difference between them will give you a pretty good indication of some of the excess working capital tied up in your business.

Let's assume that for the past year your month-end accounts receivable averaged $108,000 and your sales $60,000 a month. If your terms are 30-day net, the difference of $48,000 is past due. You have $48,000 more invested in your business than you should have.

Continuing Past Due Accounts

Of course, as a practical matter you know and I know that there are few, if any, businesses selling on a 30-day basis who do not have some continuing past due accounts. But wouldn't it be swell if you could have just one half of that $48,000 in past due accounts in cash instead of on your books? I believe that you can reduce your accounts receivable without any material effect upon your sales volume or profit In fact your profit might even increase.

Recently I examined the accounts receivable situation of several whole-

(Concluded on next page)

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See Them at Your Wholesalers

BETZ CORPORATION
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Poorly Controlled Accounts Receivable, Big Inventories Tie Up Working Capital

Concluded from preceding page)

sellers. I picked out the slowest accounts and on averaging discovered that a mere handful of customers were responsible for over 58% of the past due accounts but they were only responsible for 24% of the sales.

You probably haven't had the cash lately to make many outside investments—you sometimes feel that you have too much invested in your own business and yet I'll be willing to bet that over the year you have been a sizable investor in some 15 or 20 businesses—slow paying customers of yours. In effect, you have been stockholders in these companies—taking all the risk, receiving none of the profit, and having no voice in the management of your investment.

Of course you must extend credit—our whole economy is based upon sound credit. I'm not talking about those customers who buy on a 30-day basis and keep their accounts up to date. Nor am I talking about the regular customer who once in awhile takes on a large job that will require several months to complete—generally it is good business to help him finance that job by extending your terms.

I am talking about those fellows who are always past due—who are into you every month. They buy from you every month and they pay you something every month—they are an active account but they never get on a current basis.

Tightening Credit May Cut Sales, Up Profit

Tightening up on your accounts receivable will probably actually increase your profit even though at first it might reduce your sales volume slightly. Recently I was discussing bad debt losses with a refrigeration wholesaler and learned that last year he had to charge off $11,000 in bad accounts—so we decided to analyze those accounts.

Almost every one of the customers who went bad fit the pattern of the example I have just given you. They had been bad accounts for a year or more—always buying a little more than they paid for and slowly building up a sizable past due account. Now if this wholesaler made a profit of 5.3% on sales, his loss of $11,000 was equivalent to the profit on sales of $207,000.

Suppose your bad debt losses were equal to 1% of your sales and your profit on sales was 5%. Those bad debt losses then were equal to the profit on 20% of your sales. In other words, suppose you had refused to extend credit to those bad accounts and as a result lost the sales to them—that loss in sales could amount to almost 20% of your total sales before causing any decrease in your profit.

How To Control Accounts Receivable

Here are a few suggestions on controlling your accounts receivable situation. Keep a running monthly score sheet on sales vs. accounts receivable. It is often difficult to spot trends by comparing several groups of dollar figures—it's a lot easier if you have just one index figure a month to compare with previous months.

Divide the month-end accounts receivable total by the month's sales and use the answer as your monthly signpost. If the ratio of receivables to sales was 1.50 in August, 1.58 in September, and 1.85 last month you had better give some attention to your collections.

Customer May Not Realize You Are Carrying Him

Another suggestion—pick out those customers who are responsible for most of your past due accounts—analyze their purchases and payments and determine your average investment in their business. Armed with this simple and effective picture you can very often work a slow paying customer into a sound buying relationship. You will probably find that your customer has never thought much about it and didn't realize that you were financing him without interest and without sharing in the profits.

Perhaps a series of short term notes and a limited open account will help those delinquent to pay you off and get on a current basis. Place limits on your slow accounts and stick to them. Limit your risk and if these customers exceed the open account limit, put them on a COD basis.

If you present a clear case, show appreciation for his patronage, and evidence understanding and willingness to cooperate within the bounds of good business—the average customer will not get mad and take his business elsewhere but rather he will respect you for your actions.

Inventory Controls

So much for the accounts receivable phase of our working capital problem. Just a few words about inventories—the largest consumer of working capital. The inventory building pressures are upon us again. Slower deliveries and impending shortages are again pushing up our inventory. True we must have things to sell but let's not forget that our success is based upon inventory turnover.

We are selling components for the most part—not complete items—therefore a balance of these components is necessary. Unless all of the components are available so that an installation can be completed we may find it difficult to move those parts we have in stock. Last year the average inventory turnover of those REWA members who took part in the survey was only 4.2 times. That's getting pretty low.

I suggest another monthly score sheet for a quick check on your inventory trend. Inventory control systems are very important—they are a must. However, it is often desirable for the manager of a business to get the over-all feel of what is happening and this is difficult to do from detailed figures.

You should be getting an estimated inventory figure, based upon sales and purchases, from your auditor every month. If you are not, then estimate your inventory change. If your average cost of goods sold is 77%, take 77% of your sales for the month and call that your cost of goods. Divide the total amount of your month's purchases by this estimated cost of goods sold and enter the answer in your monthly score sheet. Obviously, if it is over 100% you have increased your inventory. The fluctuations of your inventory can be effectively spotlighted by a comparison of this monthly figure.

REWA Surveys Useful

At this point I'd like to put in a plug for the monthly REWA surveys. The results of these surveys can be an extremely valuable tool for management. Participation in this survey not only points up industry trends and the strong and weak phases of your own business—it also forces you to take an analytical look at your own business once a month. It is indeed unfortunate that so few REWA members take part—you're missing a good bet.

So much for those phases of our current problems over which we can exercise some direct control. But what of our taxes—a phase of ours as inevitable as it is costly. Continuing taxes are inevitable, but I am not convinced of the inevitability of sizable yearly increases in the amount of our taxes. Taking advantage of every little legal tax loophole—shooting tax angles—has been the common, accepted thing to do. However necessary we feel such a practice may be to our survival, I believe that it is fundamentally abhorrent to the average American businessman.

I believe the time is coming when we will stop taking sedatives and pain relievers and will do something about the basic cause—demand efficiency and economy in government. Since we are faced with several years of astronomical expenditures for defense we must find some way of paying the bill without destroying our national economy.

An Arizona Democrat, our former ambassador to England, Lewis Douglas said recently: "To safeguard us from confiscatory taxes and elaborate controls we must spend what is necessary for defense but no more than essential and cut non-defense spending to the very minimum."

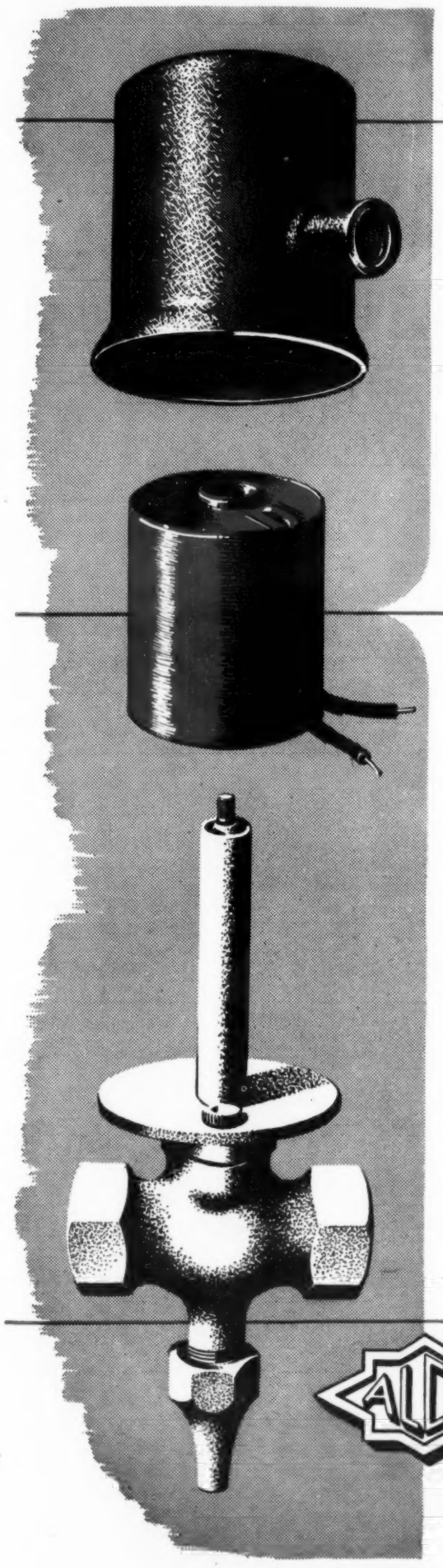
Must Take Interest In Good Government

Regardless of our political affiliations we must make Congress realize that efficiency and economy in government is not a political issue but a question of national survival.

As small businessmen we have the responsibility of survival—both the survival of our country and our own business. There are no independent small businessmen in a totalitarian state. The successful small business, started from scratch by an ambitious, hard-working free man—often a union card holder—is the best example of democracy at work.

We who have chosen to be small businessmen, aware of the advantages possible and the risks involved, must also accept the responsibility. We cannot let the new and great world responsibility thrust upon our country throw us. Let us watch our own business closely and pull them and ourselves through the trying times ahead.

Let us insist upon the same close scrutiny of the operation of our government at every level. Let us thank God we are small businessmen in America and seek His help in successfully meeting the problems ahead.



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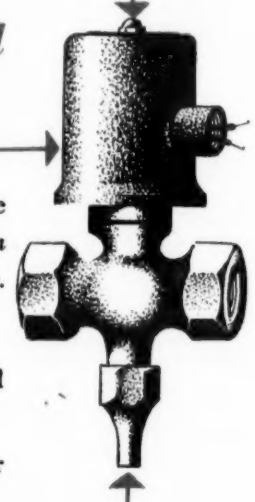

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BTC

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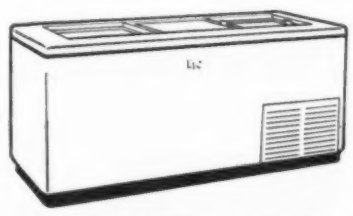

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AIR CONDITIONING AND REFRIGERATION News

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"I have always felt that whatever the Divine Providence permitted to occur I was not too proud to report. The people are not served by pussyfooting, or by that sort of journalism in which nobody will ask who is the editor of a paper or the writer of an article, and nobody will care."—*Charles A. Dana.*

Our Industry Again Will Contribute to Arming for Defense

DURING World War II the refrigeration and air conditioning industry made vast contributions toward Victory by promulgating new and improved manufacturing techniques.

Once again, in these troubled days of a "cold war" with Russia, the United States must re-build a military mightiness designed to protect our position and safeguard our liberties in a torn-apart world where military might seems to be the only bulwark against aggression.

The blueprint for renewed defense production is already drawn. Plans have been announced by Military and Naval authorities for enlarging our Army, Navy, and Air Forces; and Congress has voted handsome appropriations to buy the manufactured products which our reinvigorated war-preparedness machine will require.

Even in the few intervening years that have passed since the close of the last war, sweeping changes have been made, and will continue to be effected, in military equipment. All of these changes call for closer tolerances—and that means more air conditioning and industrial refrigeration applications.

To those time-and-material savings developments contributed by our industry to the winning of World War II's Battle of Production—such as cutting-oil cooling, shrink-fitting, rivet-cooling, zero testing cabinets, fluid cooling, refrigerated metal seasoning, air conditioned industrial dehydration, zero quenching baths, cold spot welding, and humidity-controlled photography—new and increased demands on the ingenuity and production genius of industry engineers will be demanded by "defense" manufacturers.

For example, jet-propelled aircraft operating at supersonic speeds subject pilots and crews to unbearable heat. The only answer to this new problem is super-air conditioning: air conditioners designed to absorb 350° heat load and so light that they will not seriously interfere with the speed or payload of these airplanes.

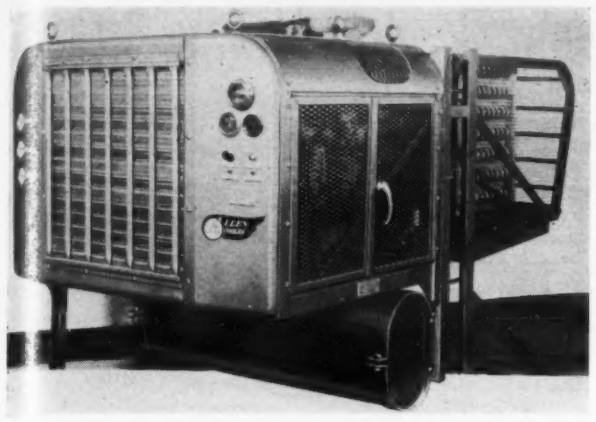
The significant fact is that our American inventive and productive capacity for fighting another world war (or we hope, our military might to keep the peace)—will be expanded continuously in the months to come.

Our armed services will draw heavily on the experience and "know-how" of this industry.

And procurers of military supplies may once again be one of our industry's biggest customers.

This situation is unpleasant to contemplate. But it's a comfort to know that the refrigeration and air conditioning industry can contribute mightily toward Keeping the Peace.

In addition to the industrial and military applications of refrigeration and air conditioning, our industry is helping prepare the nation against the next war by producing and selling home and farm freezers and locker plants. Disruption of America's intricate food distribution system (through bombing and sabotage) would be an initial objective of the foe. Home stores of frozen foods will be a safeguard should that happen.



BECAUSE FOODS being transported by truck-trailer require continuous flow of refrigerated air, Allen Cooler Div., Detroit, has developed a unit which operates from a pressure control valve rather than a thermostatic expansion valve.

Cooler for Truck-Trailer Refrigeration Operated from Pressure Control Valve

DETROIT—The Allen cooler for truck-trailer refrigeration is now available for national distribution, M. D. Swain, general sales manager of the Allen Cooler Div., Production Planning Co. here, reported.

Swain exhibited the unit, which is claimed to be the only one on the market that operates from a pressure control valve rather than a thermostatic control valve, at the recent All-Industry Exposition in Chicago.

Swain explained that the Allen cooler is manufactured on the principle that truck-trailer refrigeration for food transport requires a continuous flow of refrigerated air with only a very slight difference between air temperature and refrigerant temperature.

This theory is based on Department of Agriculture findings that refrigerated foods in transport, whether they be perishables, meats, or frozen foods, require even temperatures with a minimum loss of humidity.

CONTINUOUS, CONSTANT TEMPERATURE

By means of the patented pressure control valve, the Allen cooler operates continuously at constant temperatures. And because the refrigerated air in the trailer is constantly circulating over the coils, refrigerant temperature is held to within 10° F. of the air temperature. Thus, the coils take little moisture out of the air.

To operate an Allen cooler, the driver turns a dial to the temperature desired and starts the gasoline motor. The engine and compressor deliver maximum cooling until the selected temperature has been reached.

At this point the pressure control valve automatically adjusts the load on the compressor to the rate of output necessary to maintain this constant even temperature.

Whether the trip lasts a few hours or days, the Allen cooler controls are constantly and instantaneously regulating the cooling output to maintain the selected temperature, the company declares.

LOAD LIMITING VALVE THROTTLES REFRIGERANT GAS

Another exclusive feature of the Allen cooler, according to the manufacturer, is a load limiting valve which automatically throttles excessive refrigerant gas pressure and reduces the amount of work which the compressor must do and permits it to operate at maximum efficiency at all times.

This means, the company says, that the Allen cooler can be equipped with smaller, more efficient, and economical engines with great savings in weight for the trailer.

The Allen cooler model Z-30-D has a 30,000 B.t.u. per hour capacity at 30° F. interior temperature and 100° F. ambient temperature and 10,000 B.t.u. per hour at -20° F. interior temperature and 100° F. ambient.

It is powered by a Wisconsin air-cooled heavy duty twin engine that uses about ⅔ gal. of gasoline per hour and operates off a 6-volt battery.

The refrigeration compressor is a Universal Cooler model "P," 3-cylinder unit using "Freon-12." The condenser is air cooled by a 20-in Torrington fan. Another 20-in. fan forces air across the evaporator. The system is equipped with a hot gas defrost operated by a switch on the unit instrument panel.

Major components are connected by Aer-O-Quip flexible hose to avoid transfer of vibration and eliminate leakage. All components are mounted on a sturdy welded angle iron frame.

Over-all dimensions of the condensing unit are: length 44 in., width 30 in., and height 28 in. plus 4 in. for muffler clearance. It weighs approximately 800 lbs. complete.

The evaporator unit is 42 in. long, 34 in. wide, and 24 in. high. It weighs about 200 lbs. Approximate installed weight of the complete unit is 1,150 lbs. including battery, "Freon," and gasoline. The gasoline tank has a capacity of about 18 gals.

Swain stated that the company is now conducting a program to make standard replacement parts available throughout the country. This program is well under way, he said.

Manufacturing operations of the Allen Cooler Div. were recently consolidated in new quarters at Richmond, Mich., the company reported.

Crandall To Handle General Kitchen Equipment Line

LOS ANGELES—General Air Conditioning Corp., manufacturer of space saving kitchen equipment units, announces the appointment of the Crandall Wholesale Co. of Detroit, as its exclusive distributor in the state of Michigan.

In addition to General's refrigerators and range-refrigerator combinations, the Crandall firm will also job General's new L-K line of kitchen packages which combine sink, stove, refrigerator, drainboard, and storage drawer in less than 5 sq. ft. of floor space.

7 Companies Allowed To Expand Natural Gas Heating Service to Homes

WASHINGTON, D. C.—Seven gas companies in Michigan, New York, and New Jersey have been exempted by the Petroleum Administration for Defense from its restrictions on the expansion of natural gas service to house heating customers.

The companies proved they have adequate supplies of natural gas to serve a limited number of new heating customers without endangering the defense effort, according to the PAD.

At the same time, the agency denied applications for exemption submitted by 14 companies in Massachusetts, three in New York, and two in New Jersey.

The agency's restrictions are contained in PAD Order No. 2 effective Aug. 22. The regulation was originally in force in 15 states and the District of Columbia, but seven states have since exempted themselves from its control by assigning responsibility for natural gas supply to their appropriate state regulatory bodies. They are Maryland, New Hampshire, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin.

York To Fit Out 20 Cargo Ships

YORK, Pa.—York Corp. announced that it will furnish refrigeration equipment for 25 of the new 20-knot cargo vessels which are designed to replace present merchant ships as they become obsolete.

A Nickel Buys a Lot of Goodwill

Utah Police Keep Parking Meters Going So Appliance Prospects Have Time To Shop

LOGAN, Utah—A "courtesy parking plan" has been developed by a group of retail store operators here to offset the "parking meter menace."

The merchants had realized for some time that parking meters were cutting down on their sales. Many housewives who normally would shop in the downtown district were fearful of overstaying the hour parking limit and being fined. As a result, a lot of business was going to the community shopping centers where no parking problem exists.

When the sales curve dropped ominously low, the 12 retailers involved, including a hardware merchant, sporting goods store, women's apparel shop, a toy store, appliance dealership, a radio repair shop, a shoe store, and others went to work on the problem.

The result was the "Courtesy Nickel Plan," which has almost completely eliminated the fear of parking fines and the rankling irritation which parking tickets always bring.

Under the plan, the stores chipped in together to provide the police department with $25 in nickels, which is divided among all cruising traffic patrolmen in the downtown district. A smaller amount was expended for the printing of heavy-weight mailing envelopes, which explain on one side that the envelope should be mailed to the police department.

Each officer on duty carries a pocketful of nickels and several of the envelopes. When he finds an automobile parked overtime at the curb, he deposits five cents in the meter, and an envelope goes under the windshield wiper.

The message explains that the automobile owner has been saved a parking ticket, due to the courtesy of his downtown retail merchants, and asks that he return the five-cent piece by dropping a nickel in the envelope, and mailing it to the police department, where it will be added to the "circulating courtesy fund."

The police department traffic division, no more anxious for public ire than the retailers themselves, gladly fell in with the plan, and there has been a steady stream of nickels mailed into the police department ever since.

In fact, many motorists, unable to find change, have mailed dimes and even quarters to permit the fund to "show a profit."

Here's one retailer's reaction:

"We have lost plenty of sales in the past because a prospective customer was glancing anxiously at the clock, and had her mind on the probability of a traffic ticket, rather than the merchandise she had come in to buy," he said.

"Now, with this nickel meter plan, the most that it will cost the overtime parker is five cents—and our major stumbling block in the way of creating more downtown shopping traffic has been eliminated."

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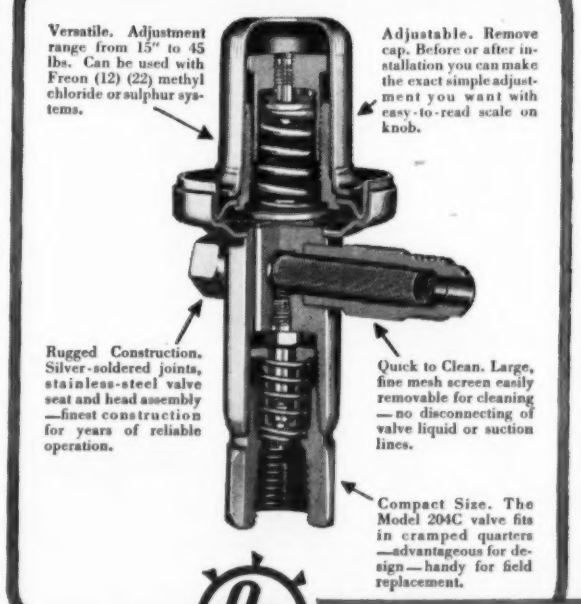
Versatile. Adjustment range from 15" to 45 lbs. Can be used with Freon (12) (22) methyl chloride or sulphur systems.
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With its versatility of use with any refrigerant, its easy-to-set, full adjustment range, and compact size, it's easy to see why the No. 204C is the fastest selling valve on the market today. Write for Bulletin R-9.

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What's New

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Dispensers, Inc. Markets Self-Contained Unit

——KEY NO. A-1216——

LONG ISLAND CITY, N. Y.—Self-contained drink dispenser being marketed by Dispensers, Inc. here employs a hermetically sealed refrigerating system designed and built by Refrigeration Parts Co. of Brooklyn.

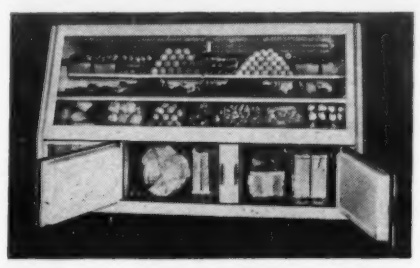
Dispensers, Inc. is eastern distributor of Selmix Dispensers, Inc., a wholly owned subsidiary of General Bronze Corp., Garden City, N. Y.

Several models of the dispensing unit are available, all of which employ the Selmix dispenser valve and carbonator and the four-stage cooling system built around a ⅓-hp. Servel hermetic unit. The dispensing unit can be supplied with one, two, or three dispensing heads or with any combination of dispensers and pressure valves.

Among the features claimed is that the automatic four-stage cooling system permits dispensing of four or more 6-oz. drinks per minute at a constant temperature of 40° with 72° incoming water.

Carbonator is said to deliver 50 gals. of carbonated water per hour, while the stainless steel Selmix valve mixes syrup and carbonated water in exact proportions. Dispenser head has extra space for holding a 1-gal. syrup jar for pre-cooling in addition to the syrup tank itself, thanks to the "dry" refrigeration system.

Condensing unit mounts in the bottom of the dispenser cabinet allowing room for a stainless steel syrup tank. Directly above unit compartment is carbonator, heat exchange unit, and pump that feeds water to carbonator.



Warren Adds Sliding Door Case to Commodore Line

——KEY NO. A-1217——

ATLANTA—The Warren Co. here has announced the addition of a sliding-door produce display-and-storage case to its "Commodore" line of commercial refrigerators.

The Commodore series includes a meat display-and-storage case, a three-shelf delicatessen display-and-storage case, a sea food-and-poultry display case, and now the Model CVDS "Dew-Making" produce refrigerator.

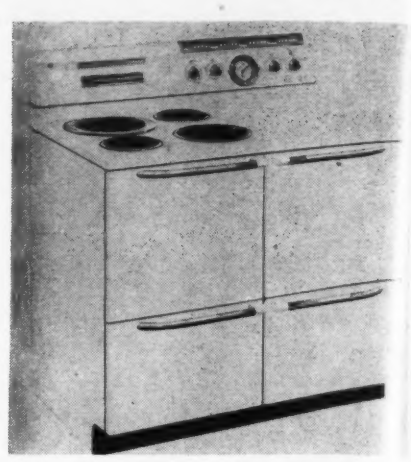
The Dew-Maker display area becomes an open compartment by removing the glass doors. Fitted with a half or full-length baffle (drip pan), half or all of the display compartment becomes a seller of dairy products.

The refrigerator is 60 in. high, "adding 20% extra capacity at no extra cost," according to Warren. "Being able to remove the sliding-glass doors during heavy customer traffic gives the CVDS all the advantages of open and closed display cases," the company added.

The condensing unit is completely self-contained in the acid-resistant white porcelain cabinet. The interior is of white porcelain.

G-E Introduces Low-Priced Double-Oven Range

——KEY NO. A-1218——



LOUISVILLE, Ky.—A new low-priced, double-oven range with push-button controls for the surface cooking units has been introduced by General Electric Co.

According to J. R. Poteat, manager of the range and water heater department, the range carries a recommended national retail price of $349.95.

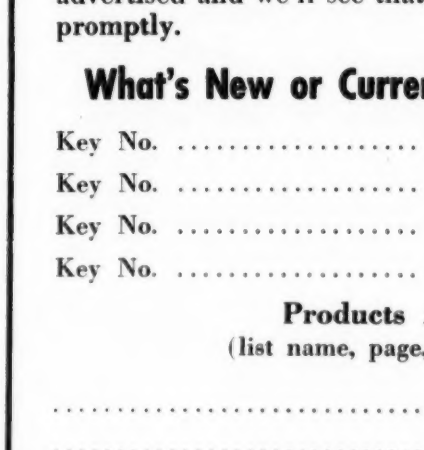
Known as the "Constellation," the range has a large master oven and a slightly smaller companion oven. Both can be used for fast charcoal-type broiling as well as baking. They are equipped with a 3,000-watt bake unit and a 4,000-watt broil unit.

The master oven can be operated by an automatic timer, which also times one of the appliance outlets on the control panel.

Surface cooking is done on two large 8-in. units, one 6-in. utility unit, and one extra-high speed 6-in. unit. All the units are operated by push-button controls mounted at the top of the control panel behind the work surface. The ovens are controlled by rotary switches.

The range has two storage drawers with a total of more than 2½-cu. ft. capacity.

Air Drier Can Remove 3 Gals. of Water per Day



——KEY NO. A-1219——

ST. LOUIS—For eliminating excessive humidity from basements, libraries, warehouses, stockrooms, laboratories, and other applications, the Kauffman Air Conditioning Co. here has introduced an electric air drier that will remove as much as 3 gals. of water from the air during every 24-hour period.

The Kauffman air drier is made in two sizes, a horizontal unit to handle closed spaces up to 8,000 cu. ft. and a vertical unit to service areas up to 14,000 cu. ft.

Completely self-contained, the drier operates by plugging it into any 115-volt, 60-cycle a.c. outlet.

The refrigeration system, using "Freon," cools the drier coil and the comparatively warm, moisture laden room air is drawn over this coil by a fan. It deposits its moisture on the cool finned surfaces of the coil, then passes over the condenser.

In so doing, the dried air is reheated and then returns to the room. The collected moisture flows from the coil to a 10-qt. galvanized container in the large unit and a slide drawer holding 2 gals. in the smaller unit. An ordinary hose connection for discharge of condensate to the sewer can be furnished.

Cabinets are all steel, finished in gunmetal gray. They measure 13 by 13 by 30 in. for the ⅛-hp. vertical unit and 15½ in. long, 14½ in. high, and 11½ in. wide for the ⅛-hp. horizontal unit.

Equipped with a hermetically-sealed compressor, the unit is guaranteed for five years.

The smaller unit is priced at $120 and the larger at $160.

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'Information Please'

Solder, 'Freon-22', Water-Cooled Condensers Prompt Questions To Experts at Annual RSES Convention In Chicago

One of the most interesting features of state, regional, and national meetings of the Refrigeration Service Engineers Society is the "Information Please" session where a panel of experts answers questions from the floor. The recent 14th annual convention in Chicago was no exception, and here are some of the questions and answers from the three morning sessions.

How About 95-5 Solder?

Q.—How does 95-5 solder compare with silfos or silver solder? Will 95-5 break down in a few years?

A.—It depends on the temperature. At -60° or lower, tin disintegrates. High temperatures, of course, will also affect 95-5 solder. If 50-50 solder is subjected to variations of heat and cold the moisture condenses on it, the moisture will attract carbon dioxide from the air. The CO_2 will attack the lead in 50-50 solder, but it won't penetrate very deep.

Can 'Freon-22' Unit Be Above Evaporator?

Q.—Can a "Freon-22" condensing unit be located above the evaporator, as is done sometimes in supermarkets? In an installation like this could a "Freon-22" system pick up the oil and carry it back up to the machine?

A.—Judging from information obtained on self-contained systems using "Freon-22," having the unit 8 to 10 ft. above the fixture and some distance away would probably present quite a problem, commented one member of the panel.

Since there'll be about 40% less displacement with "Freon-22," the suction line should be much smaller. If not, there won't be high enough velocity to return the oil, especially with the unit above the evaporator, volunteered another panel member.

There's a question, though, said a third expert, whether the system could tolerate a smaller suction line and smaller unit capacity. With a continuous tube evaporator, you'd get a better chance of returning the oil back to this "Freon-22" machine. In a system using a pot-type evaporator it's not advisable to go to "Freon-22." Oil separates out too easily. Some means, such as an oil separator, should be provided to keep the oil from getting over into the evaporator.

How To Prevent Deposits In Water-Cooled Condenser

Q.—In the past few months we've had a lot of trouble with water-cooled condensers. Water passing through both iron and copper pipes leaves a deposit on the condenser that won't wash off. It has to be removed chemically and, physically. Is there any way we can prevent this?

A.—Undoubtedly there is an electrolytic action between the iron and copper. The usual solution is to attach some metal to the pipe, such as magnesium or aluminum, which goes into solution more readily than the copper or iron. Bury this metal in the earth and connect it with a wire to the pipe.

Alcohol and Silica Gel?

Q.—What effect does alcohol have on silica gel in a system?

A.—There's no direct action between the alcohol and silica gel, but alcohol will chase water out of the silica gel because the latter has a greater affinity for alcohol than water.

What Collapsed Copper Tube?

Q.—Recently a water-cooled condenser with a counter-flow system which had operated satisfactorily for several years was found to have a collapsed tube. The water went through the inner tube, which was surrounded by methyl chloride in the outer tube. For about 12 in. nearest the compressor discharge line, the inner water tube was found to have collapsed as flat as if it had been hit with a hammer.

Bear in mind that a perfectly cylindrical ⅝ in. soft drawn copper tube requires a pressure of 5,100 lbs. to start it collapsing, but after it once starts to collapse, a pressure of only 1,200 lbs. is required to flatten it. The theory that an overcharge of refrigerant started the tube to collapse has been advanced. Are there any others?

A.—Various suggestions were offered, with the immediate cause agreed as hydrostatic pressure perhaps due to liquid slugs. An overcharge in combination with a restriction was cited by one serviceman.

Changing from 'F-22' to 'F-12'

Q.—Manufacturers are now coming out with compressors that use either "Freon-12" or "Freon-22." We find that when these compressors use "Freon-22" they don't stand up for more than three months. What has to be done to change these units from "Freon-22" to "Freon-12"?

A.—There should be no difficulty in changing from "Freon-22" to "Freon-12." It is when the change is from "Freon-12" to "Freon-22" that dangers can arise.

When you put "Freon-22" in a "Freon-12" compressor you overload the motor when operating at the same temperature. It will work all right, however, if you use "Freon-12" on high temperature applications and "Freon-22" on low temperature applications.

We change the displacement in the compressors as follows: "Freon-12," 4.9 c.f.m. and "Freon-22" 4.1. c.f.m. If the motor compressor has the same displacement for "Freon-22" as for "Freon-12" you will obtain less capacity with "Freon-12."

It is also a good idea to use a smaller suction line when changing from "Freon-12" to "Freon-22."

Should Oil Be Changed?

Q.—Is the characteristic of oil the same for both refrigerants or should I change the oil?

A.—One expert said he uses the same oil when the compressor is used for the same temperature application. But when the unit is to be used for a low temperature application, you have to change to a low temperature oil or you will get heavy waxing.

Another pointed out that "Freon-22" does not mix as well with oil as "Freon-12" does, so a lower viscosity oil should be used with "Freon-22."

A third said oil decomposition sets in when changing from "Freon-12" to "Freon-22" due to higher head pressures and higher discharge temperatures. He suggested that the serviceman clean out the system and change the oil.

The fourth advised that the best thing to do is get the manufacturer's recommendations.

Exposure to Sulphur Dioxide

Q.—Are there any harmful effects from periodic exposure to sulphur dioxide?

A.—No, there is no permanent or cumulative effect.

Does Carbon-Tet Affect Kidneys?

Q.—I've heard that using carbon tetrachloride with the bare hands will result in a kidney ailment. Is that true?

A.—It is known that carbon tet will absorb oil from the skin and get into the skin. It's possible that it could affect the kidneys. If you're wondering about it, see your doctor.

ACRMA Elects Mooney, Knoff as Board Members

WASHINGTON, D. C.—At the recent meeting of the board of directors of the Air Conditioning and Refrigerating Machinery Association, J. F. Knoff, general sales manager of Airtemp Div., Chrysler Corp., and M. E. Mooney, vice president of Baker Refrigeration Corp., were elected to membership on the ACRMA board.

At the same meeting, A. P. Shanklin, vice president of Carrier Corp., and chairman of ACRMA's Executive Committee, was elected president for the balance of the association year, replacing Fred W. Smith who has retired from industry activities. George E. Wallis, president, The Creamery Package Mfg. Co., Chicago, was elected as ACRMA vice president, succeeding C. S. Stackpole.

NCRSA Prepares Revised Membership Directory

PHILADELPHIA—Latest membership directory of the National Commercial Refrigerator Sales Association lists 131 full members and six associate (manufacturers) members.

A new revised directory is now being prepared, it was announced by NCRSA headquarters here, to include the many additional members enrolled in the association during the All-Industry Show and the group's fifth annual convention in Chicago.

Included in the directory are complete listings of each member distributor showing the names and positions of company officials as well as the types of equipment sold and the manufacturers represented by each.

Copies of the directory may be obtained from NCRSA headquarters, 1900 Arch St., Philadelphia 3.

Donald White Named Gesco Vice President

BUFFALO—Donald B. White has been appointed a vice president of General Electric Supply Corp. to take charge of a nine and one half-state area with headquarters in Chicago. He will take his new post Jan. 1.

White has been district manager of the company here with offices at 960 Busti Ave., since Aug. 10, 1949. He has been in the electrical business since 1915.

He came to Buffalo in 1925 to join Electric Supply & Equipment Co., which was later acquired by Falls Equipment Co. He joined his present employers in 1931.

Buy Peerless FOR PERFORMANCE

DRIP-PUMP for Condensate on Air Conditioners

The Peerless Drip-Pump solves the troublesome drainage problem—on air conditioners, coolers, refrigerators and other machines where condensate is present—by eliminating hazardous gravity drains altogether! The Drip-Pump lifts condensate *up and out, overhead* . . . saves valuable space.

Illustration shows Model DP-2 high capacity high lift pump for air conditioner applications. Also available is Model DP-1 packless centrifugal type pump, driven by "flea-power" motor . . . the ideal pump for use for dome, unit or flash coolers. Both models are ruggedly built for long, hard service; easily and quickly installed. Write for full information.

Peerless of America, Inc.
1501 No. Magnolia, Avenue
Chicago 22, Illinois, U.S.A.

REMCO
"loss eliminators"
Pull-up Profits for You!

Drier Filters Eliminate all losses from breakdowns—highest efficiency even at liquid temperatures up to 150°.

Liquid Indicators Eliminate losses from leaking liquid indicators. E-Z to see through, leakproof, perfectly safe.

Flare Nuts Eliminate losses from loosened and cracked flare nuts. Ideal for use anywhere in system.

At Leading Wholesalers

REMCO INCORPORATED
ZELIENOPLE, PA.

Refrigeration Pressure Controls
Ideal for all refrigeration applications where close control is desired. Individual controls for low-side or high-side pressure; also available in combination controls for both, with two independently operating controls in a single mounting case. Two of many in the comprehensive line of White-Rodgers temperature and pressure controls for refrigeration and air-conditioning. Catalog available on request.
WHITE-RODGERS
Controls
FOR REFRIGERATION HEATING AND AIR CONDITIONING
ST. LOUIS 6, MO.
Branches:
NEW YORK 52 Vanderbilt Ave.
CLEVELAND 5005 Euclid Ave.
CHICAGO 548 N. Lake Shore Dr.
Resident Sales Engineers in all Principal Cities

What Was New

At the All-Industry Show

——KEY NO. A-1210——

"LIFTING THE LID" ON A 1952 MODEL ½-HP. QUIET KOOL room air conditioner is E. M. Peters, vice president Quiet-Heet Mfg. Corp., as John Waugh, Waugh Brothers Supply Co., Oklahoma City, Okla., looks on. Extreme quietness and high operating efficiency are claimed for unit. Also in the line is new ⅓-hp. unit selling under $200.

——KEY NO. A-1211——

NEW R-38 FOUR-CYLINDER COMPRESSOR is displayed by Lynch Corp.'s Par Compressor Div. For use in 2 and 3-hp. condensing units, model has upswept manifold and accumulator tank which is said to minimize liquid or oil slugging. Ben Scholl, district sales manager, points to feature of unit.

——KEY NO. A-1215——

DISTRIBUTION PANEL of the new Superflow "Colt" underbar beer dispensing system for small taverns shown at the left, occupies the attentions of an unidentified observer at extreme left, Lyle S. Houghton, assistant chief engineer of Alco Valve Co., and Harold Hummer (in check jacket), service manager for Superflow Mfg. Co.

——KEY NO. A-1213——

LARGEST SOLENOID TYPE CONTACTOR made by Allen-Bradley Co. intrigues Marion E. Wildesen, owner of Bon-Wil Refrigeration in Camden, N. J. The Bulletin 702 contactor has a maximum current rating of 900 amps and maximum horsepower of 300 hp. at 220 volts and 600 hp. at 440 volts.

——KEY NO. A-1214——

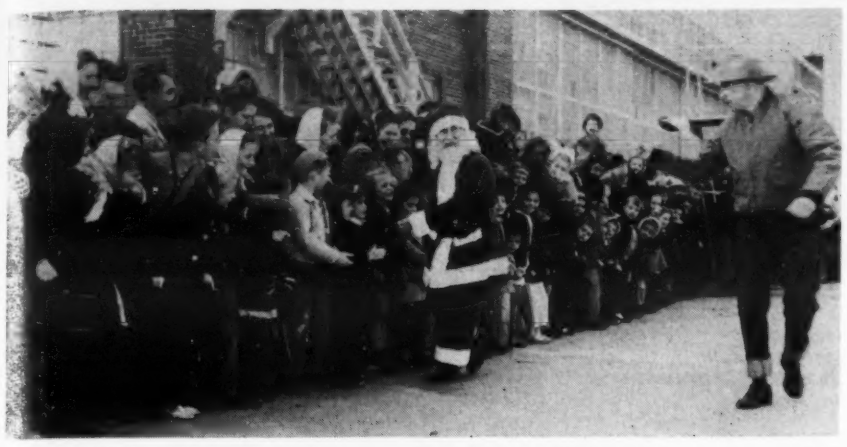
HI-G SOLENOID VALVE held by Douglas S. Sterner (l.) manager of the refrigeration controls division of General Controls, and a new "F-22" thermal expansion valve held by Ed Hunter, manager of the Duncan Supply Co., Inc. of Indianapolis were two highlighted products at the General Controls booth. Although the solenoid valve is designed for aircraft, Sterner believes it has great possibilities for all types of mobile refrigeration equipment. The expansion valve is made with either an internal or external equalizer built in.

——KEY NO. A-1212——

NEW-TYPE SLIDING DOORS are a feature of Evans Mfg. Corp.'s open self-service vegetable display case. Case provides dry display on top, open refrigerated display, and refrigerated storage compartment in one unit. Other features are a crate roller in storage compartment, and automatic defrosting. Joseph Eventoff of the company demonstrates sliding-door feature for Betty Thomas.

"Every Day is SHOW-DAY For Lehigh BLU-COLD Dealers"
Says the LEHIGH TEAM
PRODUCTION
ENGINEERING
PACKAGED TYPE UNITS FOR F12 & F22. 1/4 thru 1/2 HP.
HERMETIC UNITS—LOW TORQUE AND CAPACITOR TYPES. 1/4 thru 1/2 HP.
HEAVY DUTY UNITS—WIDE RANGE OF MODELS. 1/2 thru 3 HP.
"PAY-LOAD" TRUCK UNITS BUILT FOR HARD USE. FOR BODY BUILDERS, FLEET OWNERS, ETC.
MANAGEMENT
"Smoothie" under the spotlights of the big Chicago Show—reliable workhorse on the job. Colorful "self-salesman" on the dealer's floor—good will builder with the service man and unit user. Yes—the Lehigh BLU-COLD features thousands saw at Chicago are sound engineering developments that help to make every day "show-day" for all who sell, service or use Lehigh BLU-COLD units.
A COMPLETE LINE 1/4 HP thru 5 HP
• Packaged Units for small mounting dimensions. • Heavy Duty Units, Air Cooled, Water Cooled, Combination Air-water Cooled • Automatic High-side Defrost Units for all evaporators • Truck Units for hold-over operation • All-Electric Truck Units for on-and-off-road operation • Bare Compressors • Water Cooled Condensers • Write for complete catalog.
Lehigh BLU-COLD COMMERCIAL REFRIGERATION
Lehigh MANUFACTURING CO.
Division of LEHIGH FOUNDRIES INC.
Plant—LANCASTER, PA.
Manufacturers of Malleable & Grey Iron Precision Castings • Refrigeration Equipment • Air Valves • Automatic Vending Machines
Export Dept.: 39 Broadway, New York, N. Y.

REDUCED -VOLTAGE STARTERS
for Squirrel-Cage Motors
Reduce starting current on your compressor circuits and prevent lamp flicker with Bulletin 640 or Bulletin 740 compression resistance starters. Ideal for network systems or where the power company imposes current limitations in starting large a-c motors. Write for bulletin, "Automatic Reduced Voltage Starters" containing complete information. Allen-Bradley Co., 1313 S. First Street, Milwaukee 4, Wis.
A-B
ALLEN-BRADLEY
QUALITY
MOTOR CONTROL



SANTA CLAUS greets some of his young admirers after hopping out of his plane. Later he was driven to Jack's Appliance Store in a jeep.

'Flying Santa Claus'

Dealer's Promotion Becomes Tradition, Draws Thousands to Airport, Store

CHEYENNE, Wyo.—"Flying Santa Claus to town" for the benefit of thousands of children is an unusual promotion which has grown so popular during the past five years at Jack's Appliances here that the event has become something of an annual Yule tradition.

The stunt was developed by brothers Mel and Irv Crown, heads of the store, shortly following World War II, when it was felt that "something unusual" was needed to stir early-season buying interest. While Santa Claus on exhibition in department stores and shops through the downtown shopping district was nothing unusual, the Crown brothers felt that they could hit upon some more sensational "Santa Claus stunt" to attract attention to the well-stocked store.

Ideas such as bringing Santa Claus to the store in a sled drawn by actual reindeer were discussed and given up as impractical. Then Mel and Irv hit upon the idea which has worked out so well that there has never been any need to change it since—which was merely to send Santa Claus to a flying field, some distance from the city "under wraps" where he dons his familiar costume, returning to the Cheyenne Municipal Airport via a light plane piloted by the city's mayor.

The mayor, an ex-Air Force pilot, cheerfully fell in with the plans, and Jack's Appliances had a stroke of pure luck when they located an old-timer among Cheyenne's residents who had both a genuine white beard, and previous experience in playing St. Nick.

"The combination could scarcely be beaten," Mel Crown grinned. "For that reason we gave it the best Hollywood build-up we could afford."

A full-page advertisement was run in November, during the first promotion, announcing that Santa Claus would arrive by air at the Municipal Airport Dec. 1, and wanted Cheyenne's youngster population to meet him—after which he would hold individual audiences with his toddler friends in the appliance store. This was followed by smaller advertisements, every day through the month, until, when Dec. 1 rolled around, the Wyoming capitol city was well primed for the event.

Neither the Crown brothers nor the Cheyenne Police Department could believe their eyes on Dec. 1, during the first promotion, when the crowd, expected to consist at best of a few score children, grew into thousands. Ropes were hastily put up, and loudspeakers at the airport pleaded with the crowd to remain in place.

When the yellow monoplane landed, and putted up to a parking space on the ramp in front of the crowd, "Santa Claus" was greeted by city officials in full regalia, with a microphone and public address system broadcasting the ceremonies to the crowd.

Santa Claus was rushed to Jack's Appliance store by jeep, and during the rest of the month, the store was not only filled to maximum capacity, but there was often a long line, stretching down as far as two blocks away, of children and their parents, waiting to meet Santa Claus. The rush extended far into the evening hours, with the result that Jack's, during each Christmas holiday, has been forced to remain open extra hours, merely to maintain goodwill.

Since that first time, the stunt has been repeated each year, and always with ever-increasing success. For the 1950 event, there was scarcely enough space on the airport apron and grounds to accommodate the 8,000 or more people who awaited the arrival of Santa Claus, and the resulting stream of traffic into the store for personal interviews was so heavy that it required police assistance to prevent blocking off of the avenue altogether.

Results from a sales standpoint have been naturally fine, but even more important is the warm friendship which the Crown brothers have earned from the Wyoming city's population.

Philco '52 TV Output Is on Allocation Basis

PHILADELPHIA — "Demand for . . . Philco products is running at gratifying levels and the corporation looks forward to completion of another successful year," William Balderston, president of Philco Corp. told stockholders recently.

"Philco factory and distributor-dealer (television) inventories which reached a high point during the summer are now depleted and the demand for our 1952 models is so great that the entire production is on an allocation basis to distributors and dealers," he declared.

"As one of the principal suppliers of the government, Philco Corp. has received large additional orders for electronic equipment and missiles as well as for industrial microwave systems since the last quarterly report was made to stockholders," Balderston noted.

In his report for the first nine months of 1951, Balderston reported that sales totaled $228,431,000 as compared with $229,205,000 in the same period in 1950. Earnings before taxes totaled $15,798,000 as compared with $19,569,000 a year ago, it was pointed out.

Net income after Federal and state income taxes and excess profits taxes at the rates established this year amounted to $7,963,000 or, after preferred dividends, $2.18 per common share.

This compared with an adjusted net income of $9,877,000 or $2.72 per share for the same period last year, it was indicated.

Blum Flies To Study Frozen Food Market In Central, South America

PITTSBURGH — Frank A Blum, president, Frank A. Blum & Sons, Inc., is on a 10,000-mile plane trip to Central and South America to investigate the possibility of frozen food sales in those areas.

Early reports that have come in from Blum along the route indicate sources are very much interested in selling frozen foods and that education during past years as to the value of frosted foods has taken hold.

Blum, who made two previous trips through the territory before 1950, is learning 1) how much product can be handled, and 2) the facilities for proper handling.

Blum's itinerary includes Cuba, Haiti, Puerto Rico, Central America, and South America. He returns to Pittsburgh Dec. 15.

Temperature Engineering Corp. Granted Topeka, Kans. Charter

TOPEKA, Kans.—Temperature Engineering Corp. here has been granted a charter, with $50,000 capital stock.

The heating and air conditioning firm, a Kansas City, Mo. corporation, has had an office here since May of 1948 and now has incorporated its Topeka office.

Leon B. Carlson, has been manager of the Topeka office since its opening here. Carlson joined the firm in Kansas City in 1946.

SLANTS on Service

Smoke Gun Shows Movement Of Air over Open Cases

Open self-service cases should not be installed in a location where they are likely to receive blasts of air from an air conditioning outlet, unit heater, fan, or evaporative cooler. If such a location cannot be avoided, it may be advisable to erect a barrier to keep these excessive drafts from hitting the open case.

Exact view of the air movement across such a case can be obtained if a small hand smoke gun is employed by the serviceman. The gun gives off smoke that is of approximately the same density as air and thus behaves in about the same manner. Within broad limits, the smoke is relatively harmless.

* * *

Use Pressure Recorder To Set TXV on Open Case

Use of a pressure recorder while adjusting the thermostatic expansion valve on an open-type refrigerated fixture is strongly recommended by one manufacturer of such cases.

Refrigeration of open cases is a difficult problem at best so it is necessary that the system operate at peak efficiency, he emphasizes. The pressure gauge normally used does not give an accurate picture of valve operation whereas a pressure recorder does.

Looking for a source for Dependable Copper Tube

— — — PLAIN or FABRICATED?

If copper tube is a component of the product you have been asked to make for the defense effort, look to Wolverine to supply it—either plain or fabricated. As a prime contractor, you may welcome this suggestion, especially if in your regular production you use other materials and different operations.

Here are some of the many reasons why you should choose Wolverine as the source for top quality tube:

1 You have at your command the specialized skill and experience of over 34 years of exclusive tube manufacture.

2 At Wolverine you'll find the most modern and efficient facilities to produce the tubular part that will meet your specifications.

3 Your problem will be accepted with a thorough understanding and regarded in utmost confidence. We are accustomed to working with government agencies.

4 Available to you are many specialized processes, like end spinning and finning—both of which were developed by Wolverine.

5 Careful consideration will be given special packaging, palletizing, crating, etc., to assure the receipt of your required tubing or tubular parts in satisfactory condition.

•

Call on the nearest Wolverine sales office (there's one in every principal city) for any assistance you need. Or consult our Customer Engineering Service located in Detroit.

WOLVERINE TUBE DIVISION

Calumet & Hecla Consolidated Copper Company

INCORPORATED

Manufacturers of seamless, nonferrous tubing

1413 CENTRAL AVENUE • DETROIT 9, MICHIGAN

Sales Offices in Principal Cities *Plants in Detroit, Mich. and Decatur, Ala.*

Wolverine Mill Depots:

DETROIT, MICH. • DECATUR, ALA. • HOUSTON, TEXAS • LOS ANGELES, CALIF.

LONG ISLAND CITY, N. Y. • PHILADELPHIA, PA. • PROVIDENCE, R. I. • ST. LOUIS, MO.

Export Department, 13 E. 40th St., New York City 16, N.Y.

Lovely to Look at... So Wonderful to Own

ROP

8.5 cu. ft. BEN-HUR. Holds up to 425 lbs. Others, 12.5, 16 and 20 cu. ft.

Guaranteed by Good Housekeeping

HOLIDAY DINNERS EASY—baked and prepared weeks ahead and frozen in the BEN-HUR. That's only one of many reasons families enjoy the food-saving BEN-HUR.

The New "R.O.P."* BEN-HUR is today's easiest-selling freezer. There are many reasons—including today's more powerful point-of-sale dealer help program. Ask about it!

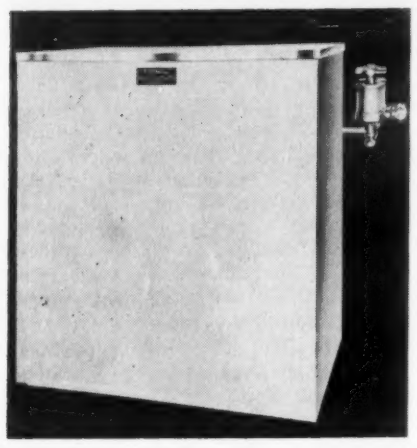
(*Record Of Performance)

BEN-HUR MFG. CO. • Dept. AC — 634 E. Keefe Avenue • Milwaukee 12, Wisconsin

BEN-HUR FARM and HOME FREEZERS

HEALTHFUL LIVING THROUGH FROZEN FOODS

What's New (Cont.)



Photographic Filter Cooler Cuts Damage to Emulsion

——KEY NO. A-12110——

BROOKLYN—Critical temperature control of water for photographic processing as well as the conditioning of water to prevent damage to film emulsions by abrasive particles are both achieved by the new photographic filter-cooler now being produced by Filtrine Mfg. Co. here, the company reported.

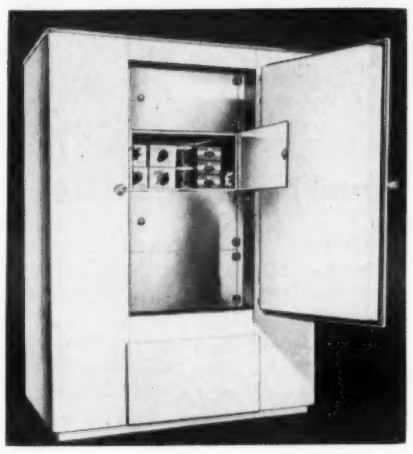
Built for installation with single or multiple photographic, X-ray, lithography and photo-engraving sinks, the new unit is said to maintain the constant 68° temperature essential to safeguard grain of plates and film during processing.

"Simultaneously," the company said, "the ever-present, minute abrasive particles which cause scratching of emulsion and spotting of negatives are completely eliminated from the processing water. This results from integration of a Filtrine photographic water filter of capacity rated to the cooler."

A storage feature of the cooling unit provides a large reserve of correct temperature water for immediate, full-volume start-up at the developing sink and for emergency requirement. The storage feature is also claimed to insure long-cycle machine operation with resultant saving in operating cost, reduction of service requirements, as well as an extended machine life.

"Operating economy is further effected by a pre-cooling unit which permits waste water to flow through a double-wall tube and reduce temperature of water entering the cooler," the company said.

Available in horizontal design for installation under sink or counter, also in vertical style with chemical resistant, stainless steel work-table top, the new filter-cooler is built in capacities of from 40 to 160 g.p.h. for single sink operation and capacities up to 400 g.p.h. to feed multiple sinks or darkrooms from a single unit.



Sub-Zero Freezers Offer New Designs, Capacities

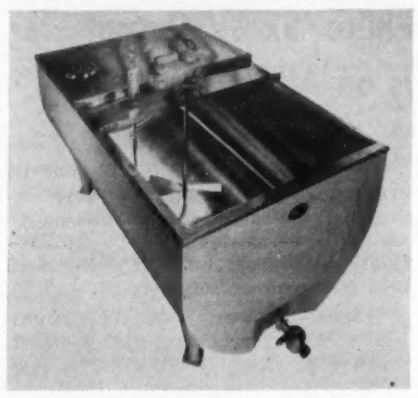
——KEY NO. A-12111——

MADISON, Wis.—A new line of freezers featuring new capacities and designs has been announced by Sub-Zero Freezer Co., Inc. here.

The company has retained some sizes—21, 24, and 60-cu. ft. capacities—but is now also producing 17, 25, and 32-cu. ft. models.

All the freezers in the present line are upright cabinets, and all have inner compartments with individual doors.

Besides the standard models, Sub-Zero specializes in custom-built freezers for all types of applications and in special refrigerated equipment.



Steinhorst Unit Cools Milk Right After Milking

——KEY NO. A-12112——

UTICA, N. Y.—Specially designed to provide both fast cooling immediately after milking and sanitary low temperature storage until tank-truck pickup, three new bulb milk cooling tanks have been introduced by Emil Steinhorst & Sons, Inc. here.

Tanks are made in 200, 300, and 400-gal. capacities. Each tank is equipped with interchangeable covers, a stainless steel liner, built-in cold section at bottom, agitator, measuring stick, and thermometer.

The legs of the tank are adjustable and the tank bottom is pitched to provide complete drainage.

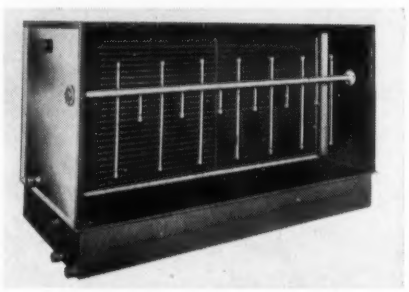
The outlet, designed to receive a standard sanitary valve, is 1½ in. in diameter unless otherwise specified.

The tank is of sanitary construction and easy to clean. All parts that come into contact with the milk are constructed of polished stainless steel, type 302. The slow speed agitator can be lifted out without removing its motor.

All sizes are approximately 8% over their rated capacities. The refrigerated (evaporator) surface of all tanks is under one fourth of the volumetric capacity and over one third of the surface area.

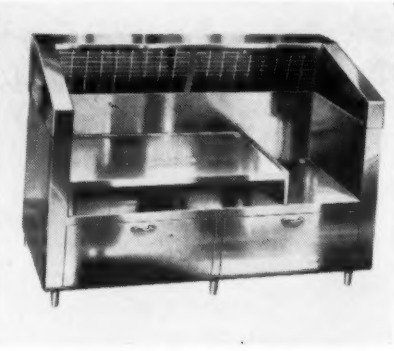
A well is provided on the rear wall of the inner liner to receive the bulb of the temperature control.

Correction



KENNARD DEHUMIDIFIER

In the Nov. 5 issue of the NEWS two pictures in the "What's New" section, pg. 34, were transposed. Kennard Corp. showed a picture of its new sprayed coil dehumidifier. Grand Rapids Cabinet Co. introduced its down-draft grille stand for luncheonettes. The accompanying pictures are correctly identified.



GRAND RAPIDS GRILLE STAND

Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Kason Hardware Catalog Lists over 200 Items

——KEY NO. M-1210——

BROOKLYN—A new refrigerator hardware catalog has just been released by the Kason Hardware Corp. here.

This 100-page book illustrates and describes over 200 hardware items most extensively used by the commercial refrigeration industry. Full size illustrations, diagrams of installations, and complete specifications are listed.

Among the new lines featured are — non-protruding Edgemount latches, adjustable Edgemount hinges, newly designed iron hardware and safeguard latches for super-freezer and cooler doors, equipped with emergency exit devices.

A new hardware guide, compiled under the headings of particular refrigerator units, has been included to simplify the selection of specific items.

Revised Manual on Welding Has More Pages, Pictures

——KEY NO. M-1211——

NEW YORK CITY—A giant fourth edition of its "Manual of Welding Design and Engineering" has been announced by Eutectic Welding Alloys Corp. here.

Enlarged to 72 pages, the new edition contains 62 new photographs and 132 new drawings together with the latest data and how-to-do-it articles. It is illustrated with scores of application drawings, weld diagrams, and tables containing latest information on melting temperatures, tensile strengths, and corrosion factors.

Detailed information on more than 100 different "Eutectic Low Temperature Welding Alloys" for use on cast iron, steel, copper, brass, bronze, aluminum, and other metals is included along with discussions of all heating methods.

Cambridge Describes 'Absolute Air Filter'

——KEY NO. M-1212——

SYRACUSE, N. Y.—The "Cambridge Absolute Air Filter," originally developed for the Atomic Energy Commission and now available in quantity for commercial and industrial users, is described in a new specification sheet and illustrated folder just released by Cambridge Corp.

The unusual new filter provides "virtually absolute removal of all measurable dust, smoke, fumes, spores, radioactive particles, and other microscopic foreign matter from the air," it was stated.

All filters are tested after production for at least 99.95% efficiency by a special testing device using a controlled smoke generator to produce smoke particles three-tenths of a micron or 3/250,000 of an inch in diameter. Even the finest particles are automatically recorded and measured on photoelectric cells in the testing chamber by means of light reflected from the particles.

Filters are being produced in five sizes from 15 to 850 c.f.m. Life expectancy under normal conditions with proper pre-filtering is estimated at one to three years. The filters are light, compact, and easily installed.

Cambridge Corp. maintains an application engineering department to assist buyers in designing installations. The company is jointly owned by Carrier Corp. and Arthur D. Little, Inc.

BBD&O Booklet Describes Small Advertising Campaign

——KEY NO. M-1213——

NEW YORK CITY—A new 36-page booklet published by Batten, Barton, Durstine & Osborne, Inc., and compiled by John Caples, vice president in charge of copy testing, reveals the "how to" of a successful small-advertising campaign.

Through an analysis of 63 case histories, the booklet shows the importance of small advertisements to such companies as du Pont, U. S. Steel, General Mills, Bromo-Seltzer, and many others.

Seventy-three illustrations, actual reproductions of the advertisements, as they appeared in newspapers and magazines, range in size from 1-in. single column to 6-in. double column.

"Reproductions of successful selling advertisements point up the special importance, when using limited space, of vivid illustrations."

Campaigns, which used only small advertisements over a long period of time, are shown along with campaigns which used small advertisements as an effective tie-in or reinforcement for full page ads.

A limited supply of copies of this 9 by 12 booklet are available to sales and advertising executives.

for all water cooling -- use Filtrine
-sell more condensing units

"DO" Orders are Vital!

For all Federal Agencies . . . All Armed Services . . . Filtrine products meet government specifications.

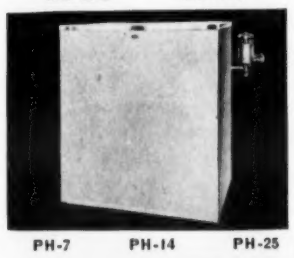
Promote your own condensing unit sales with Filtrine's 20-year-life construction . . . high capacity . . . Super Storage . . . more than 40 years' dependability.

MC-14-S MC-43-S MC-25-S MC-40-S

COOLERS FOR MESS HALLS — CAFETERIAS

Taste-Master

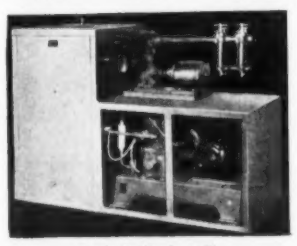
Sell your condensing unit with Filtrine Stainless Steel or Duco finished cabinets, equipped to suit with top/side shelves, bubblers, glass-fillers. Can be Taste-Master equipped to remove chlorine, rust, sediment from water.



PH-7 PH-14 PH-25

COOLERS FOR X-RAY & PHOTOGRAPHY

Sell your condensing unit with Filtrine models repeatedly named by V.A., Signal Corps, Air Force, etc. for X-ray and photo-labs. Under counter design and floor-mounted models with stainless steel work-table top. Filters (extra) to prevent scratched and pin-holed negatives.



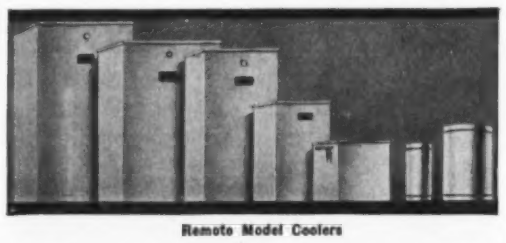
Typical 'Packaged' Circulating Chilled Water System

PACKAGED CIRCULATING CHILLED WATER SYSTEMS

Sell your condensing unit! Systems for drinking or processing water—completely packaged with pump, controls, your condensing unit factory installed. Capacities 5-400 g.p.h.; storage 5-150 gals. Filters and Rectifier-Dechlorinators (extra) to insure taste-free, sparkling water.

REMOTE COOLERS

Sell your condensing unit with remote models for new and replacement jobs — all applications. Capacities 10-1000 g.p.h.; storage 7-300 gals. Filters, Rectifier-Dechlorinators available for all sizes.



Remote Model Coolers

Get our new *"How to Sell DO Jobs"*—write Dept. RF1

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CLEANABLE WATER-COOLED CONDENSERS

More Efficient Double-Tube Counter-flow Design

½ to 25-Ton Capacity

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Ranco Inc.

COLUMBUS 1, OHIO

WORLD'S LARGEST MANUFACTURERS OF REFRIGERATION CONTROLS

Trends In Air Conditioning

15 Years Brings Lighter Equipment, Better Air Distribution, More Attractive Ducts, Water Saving Devices, and More Packaged Units

CHICAGO—The air conditioning industry has made "startling progress" in the last 15 years, according to H. J. Prebensen of Air Comfort Corp., Chicago.

Speaking to the 6th annual convention of the Refrigeration & Air Conditioning Contractors Association on the trend in air conditioning construction, Prebensen said the progressive trend of the industry "is perhaps unusual when compared to the advancement of other industries.

Trend Shows Desire To Improve, Modernize

"The trend is indicative of a real desire to improve, modernize, and keep pace with our rapidly changing times.

"It is gratifying to note that our very young industry has been for the establishment of sound practices and that it has made a worthy effort to obtain a high degree of public acceptance. Many things have contributed to that progress. . . .

"During the past 10 years we have seen substantial changes in our domestic economy, important technological developments and a seemingly never-ending threat of inflation with spiraling costs and prices.

Price Increase Only 20 to 25%

"During the same period when our national manufactured products increased in prices by 110% and food by approximately 127%, the over-all price increase in the air conditioning industry was probably more like 20 to 25%.

"The general trend of our industry, therefore, has been one of increased production by modern methods so as to constantly reduce cost.

"Manufacturers of air conditioning equipment and its many component accessories should be given measurable credit for the progress of construction in this field. I point out some of these as follows:

"1. The development of high speed compressors has materially aided air conditioning construction because space requirements and weights of such equipment have been materially reduced. The modern 'Freon' compressor occupies half the space and weighs half as much as did its predecessor 10 years ago.

"2. The general satisfactory performance of hermetic compressor units has contributed materially to the general satisfaction with packaged air conditioners.

Packaged Units

"3. Development of highly dependable packaged air conditioners has brought air conditioning to a wider market. These units, built on a repetitive production basis, factory assembled, and tested, have been the means of reducing first cost of the ultimate customer and making possible field installations that otherwise would be cumbersome.

"4. Air distribution which has always been one of the most important factors of any air conditioning installation has received sound intelligent study to the end that satisfactory devices are today available for even the most complicated applications.

"5. Serious attention has been directed to the improvement in the appearance of sheet metal ductwork, so as to obviate the necessity of furring such distribution ductwork.

High Velocity Air Distribution

"6. The development of a high velocity air distribution system has made its contribution to the satisfactory conditioning of multi-story buildings where space cost is a principal item. Here, I refer to the so-called "conduit systems" as originally developed by Dr. Carrier.

"7. Very effective work has been done on sound absorption materials and their application. Air distribution can be accomplished today without distracting noises.

"8. We are well aware of the progress of instrumentation for the trouble-free control of temperatures and humidity.

"9. Satisfactory progress has been made in the design and development of instruments for field use in checking and adjusting any air conditioning system. Among these are such things as the velometer, the anemothern, and the General Electric leak testing device.

"10. Miscellaneous accessory items, such as expansion valves, water valves, etc., have gone through a modernization process to make them more dependable in the field and easier of adjustment.

"11. Electric deposition welding, torch welding, brazing and soldering, materials and techniques have received careful study, resulting in more uniform field fabrication of pipe and fittings.

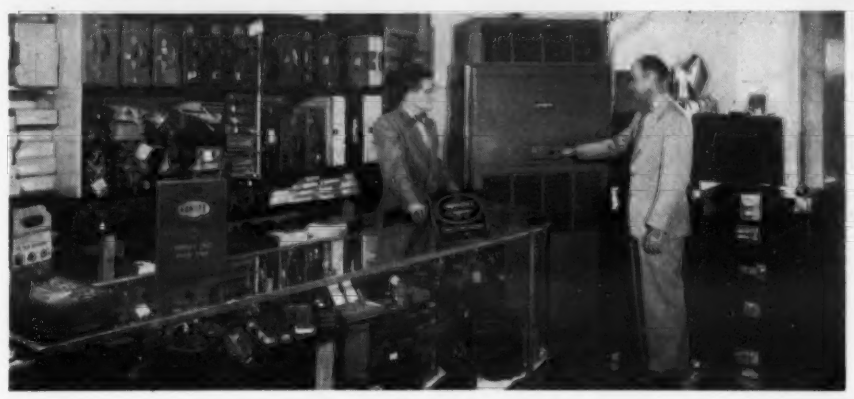
Water Saving Devices

"12. Water saving devices have received important attention. Temporary water shortage in some areas has made the water saving devices mandatory. In other locations high cost for new water service has increased the use of water saving devices.

"Manufacturers of cooling towers and evaporative condensers made important contributions to the advancement and design of these pieces of equipment. Cooling towers are now common in air conditioning jobs even as small as 5 hp."

The future trend of the industry, Prebensen said, will be governed more and more by government restrictions on steel, aluminum, and copper, and on construction.

Prebensen concluded his talk by showing pictures of air conditioning installations.



H. Thomas Yandle, right, Frigidaire representative of the Allied Refrigeration Co., demonstrates the controls of a 3-ton self-contained Frigidaire unit serving Edwards Luggage Shop. E. S. Robb, store owner, looks on.

Business Normal as Luggage Shop Installs Ductless Air Conditioning

HAMILTON, Ohio—Business continued as usual at Edwards Luggage Shop here while a self-contained 3-hp. air conditioner was installed.

The leather goods store is of average size with merchandise shelves constructed on three walls and a glass show window and entrance across the front. The Frigidaire unit was installed in a little-used corner.

All electrical, water, and drain connections being grouped at the base of the cabinet, a minimum of time and effort was expended by Allied Refrigeration Co., the installing dealership, in putting the unit into operation. And all the time, the store was not torn up and sales did not diminish.

Ventilation is supplied by the normal use of the single entrance to the store. The four-way distribution hood, which is standard equipment on Frigidaire units of this design, made it possible to condition the merchandising area without ducts.

E. S. Robb, operator of the store, pointed out that when his shop first opened in its present location in the heart of the Hamilton business district, summer heat had a direct bearing on his business.

"The efficiency of our sales people was lower," he declared, "and our customers more irritable. Fans were installed, but they merely stirred up the hot humid air. After this first summer, I became convinced that I could not afford to operate without air conditioning."

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ROLL-FORMED AND STAMPED PRODUCTS

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FUNCTIONAL and DECORATIVE
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THERMOBANK for AMMONIA

For the First Time, a completely automatic ammonia system for freezing temperatures

THERMOBANK for Ammonia furnishes the Refrigeration Industry for the first time the only completely automatic (self-defrosting) Ammonia System for Temperatures below 32° F, completely eliminating Water Spray, Brine Spray, Electric Heater, and all manual attention from the operation of the system.

THERMOBANK for Ammonia is an Automatic Re-evaporative Hot Gas Defrost System using a THERMOBANK in the suction line. The THERMOBANK (Re-evaporator) is an air-to-refrigerant heat exchanger capable of absorbing sufficient heat from the outside air for defrost at outside temperatures as low as 0°.

THERMOBANK for Ammonia can be used as part of an existing system or as the only evaporators on the system.

WRITE FOR BULLETIN TA 182

KRAMER TRENTON CO. Trenton 5, N. J.

Refrigeration Problems

and their Solution

by Paul Reed

For Service and Installation Engineers

Paul Reed

'Freon-12' In Field Work (3)

SOLENOID VALVES

As far as orifice size is concerned, solenoid valves that are large enough for "Freon-12" are also large enough for "Freon-22" under the same conditions of temperature, pressure volume of refrigerant to be passed, etc.

In fact, for the same refrigerating capacity, the solenoid valve for "Freon-22" may be about 19% smaller than for "Freon-12." Under standard low conditions of 5° F. evaporator and 86° F. condensing, the liquid line solenoid must pass 83.8 cu. in. of "Freon-12," but only pass 68.1 cu. in. of "Freon-22" per minute.

Also, under standard ton conditions, a suction line solenoid valve must pass 5.81 cu. ft. of "Freon-12" vapor per minute and only 3.60 c.f.m. of "Freon-22," so the solenoid valve for "Freon-22" may be about 38% smaller.

In practice, the liquid line values would be about the same if the evaporator temperature was 5° and the condensing temperature was 86°; but the volumes of suction gas would be about 20% to 25% greater, depending upon the volumetric efficiency of the compressor, superheating, pressure drop, etc.

Most liquid line solenoid valves on the market today were designed for use with "Freon-12." With "Freon-22" they would be required to lift against greater inlet pressures and against greater differences in pressure across the valve.

In selecting a liquid line solenoid valve for use with "Freon-22," it would be well to check the specifications of the solenoid valve manufacturer to be sure that the valve will perform properly against the increased "Freon-22" pressures.

LINE SIZES

Since the volume of "Freon-22" liquid per standard ton is about 19% less than for "Freon-12," the sizes of liquid line suitable for "Freon-12" will be ample for "Freon-22."

Displacements for "Freon-22" being 35% to 40% less for "Freon-22" than for "Freon-12," suction lines suitable for "Freon-12" will be oversize for "Freon-22." For short runs, it may be possible to use the next smaller size of tubing for "Freon-22" suction lines, that has been recommended for "Freon-12" suction lines. This will, in fact, be advisable if the compressor is mounted at a higher level than the evaporator.

At 80° the density of liquid "Freon-12" is 81.4 lbs. per cu. ft., and that of "Freon-22" is 74.2 lbs. per cu. ft. Therefore, the pressure drop per foot of rise of a liquid is .57 p.s.i. for "Freon-12" and 52 p.s.i. for "Freon-22." If as is often considered the maximum, a 5 p.s.i. pressure drop is permitted in the liquid line, a rise of 8.8 ft. could be permitted for a "Freon-12" liquid and a rise of 9.6 ft. could be permitted for a "Freon-22" liquid line, if there is no additional pressure drop due to the frictional effect of the tubing, fittings, drier, heat exchanger, etc.

PRESSURE CONTROLS

Since the suction pressures for "Freon-22" are much higher for "Freon-12" for the same evaporator temperature, the low-pressure control must be reset to the higher pressures corresponding to the evaporator temperature. Table 3 may be useful in making these adjustments to the low-pressure control.

Table 3

Evaporator Temperature °F.	Saturation Pressures Lbs. per Sq. In Gauge "Freon-12"	"Freon-22"
-20	.6	10.3
-15	2.5	13.3
-10	4.5	16.6
- 5	6.7	20.2
0	9.2	24.1
5	11.8	28.3
10	14.7	32.9
15	17.7	37.9
20	21.0	43.3
25	24.3	49.0
30	28.5	55.2
35	32.7	61.9
40	37.0	69.0

As will be observed, not many low-pressure controls can be set for "Freon-22" cut-in pressures corresponding to evaporator temperatures above 25°. Not only are there few "Freon-22" applications for evaporators in the temperature range above 25°, but for such applications, temperature controls could be used.

REFRIGERANT CYLINDERS

In filling refrigerant cylinders, it must be remembered that at a room temperature of 80°, liquid "Freon-22" has a density of only about 90% that of "Freon-12," so a refrigerant cylinder should never be filled with as much "Freon-22" by weight as "Freon-12." The "Freon-22" of equal weight, fills the cylinder about 11% more, and a much smaller rise in temperature may cause the cylinder to burst, with perhaps painful or possibly fatal results.

MOISTURE

The solubility of moisture in "Freon-22" is very much higher than in "Freon-12," and that is a distinct advantage, especially in low temperature installations, for there is less probability of free moisture in the system with "Freon-22" than with "Freon-12."

When shipped from the factory, "Freon-12" is guaranteed to contain not more than 10 parts per million (p.p.m.) (.001%) water by weight. Its "dewpoint" at this condition is 7° F., which means that if the temperature of the "Freon-12" is lowered below 7° F., some of the absorbed water will condense out and become free water which can freeze up at the expansion valve or capillary tube.

In a freezer having a -20° evaporator, "Freon-12" from factory cylinders would have to dry out somewhat to avoid freeze-up at the expansion valve or capillary; and, of course, any additional moisture in the system would also have to be removed.

When "Freon-22" is shipped from the factory, it is guaranteed to have not more than 25 p.p.m. (.0025%) water by weight. Thus, "Freon-22" in factory cylinders may have as much as 2½ times as much water in it per pound as "Freon-12." But, the "dewpoint" temperature of "Freon-22" having 25 p.p.m. water is -92° F.; so although "Freon-22" may have more water in it than "Freon-12," it can hold a great deal more moisture without it condensing out and becoming free water. "Freon-22" from factory cylinders, can be used in low temperature equipment down to -92° F. evaporator without any free water forming, unless, of course, the equipment itself had some moisture in it.

This is very helpful; for although care should be used to keep a "Freon-22" system dry, the same as a "Freon-12" system, there is far less probability of frozen expansion valves or capillaries with "Freon-22," than with "Freon-12."

If excessive moisture does get into a "Freon-22" system, it can be removed in the same manner as in the case of "Freon-12." In the field, the most practical method is by the use of a liquid line drier containing calcium sulphate (Drierite), activated alumina, or silica gel.

Other methods were described in previous issues, particularly those in the two series "Mixing Water Vapors and 'Freon-12' Vapors" and "Drying Refrigerating Equipment" published in this column in January and February, 1951; also the excellent series "Moisture" by F. Y. Carter, published in the Oct. 1 and Oct. 8, 1951, issues.

If for some reason, it is considered necessary or advisable (which is not often the case) to change an existing system from "Freon-12" to "Freon-22" or vice versa, the difference in solubility of water in the refrigerant should be taken into consideration. When changing from "Freon-12" to "Freon-22," no trouble should be experienced with moisture if care is taken to prevent entrance of moisture during the changeover.

In changing from "Freon-22" to "Freon-12," trouble might be experienced; for there may be enough moisture left in the system which, although it caused no trouble with "Freon-22," might cause some trouble with "Freon-12" as the refrigerant. A large drier should be installed and it should provide sufficient protection against freeze-up.

Seeger Refrigerator Sales Hit New High

ST. PAUL — Seeger Refrigerator Co.'s net sales volume, which set a new high record for the third consecutive 12-month period, totaled $84,972,031 in the fiscal year ended Aug. 31, 1951, compared with $81,500,371 in the preceding year, the company's annual report has disclosed.

"While we anticipate good demand for our commercial products in the coming year, we also expect a substantial curtailment of civilian production because of restrictions on the use of steel and other metals," Walter G. Seeger, board chairman, and John S. Holl, president, said in a joint letter to stockholders.

"Defense production already started and the large backlog of orders yet to be filled should serve well in offsetting any decline in commercial business."

Net earnings for the year after provision for income and excess profits taxes were $4,155,175, as against $5,565,535 the year before.

Gross earnings before taxes and interest expense were a record high $10,506,048, compared with $9,796,704.

The gain in gross was more than offset by record state and federal tax provisions of $6,300,000, which compared with taxes of $4,150,000 the year before and $2,775,000 two years before.

Two new civilian products were developed and placed in production during the year, the company said. One is an automatic ice cube maker for use in hotels, restaurants, and similar establishments, and the other is an air drier for domestic use in removing excessive moisture from damp and musty rooms.

NOW ONLY $1.00

REFRIGERATION AND AIR CONDITIONING DIRECTORY

Brand-new **1952 EDITION** . . . *now in Stock!*

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The 1952 Edition of the Directory is the 17th printing of this exclusive "Buyers' Guide" . . . for years the standard listing of who makes what, and where, in the refrigeration and air conditioning industry.

This priceless help for you in your business is the result of many months of careful research and thousands of dollars of expense. The most complete compilation of Manufacturers, Products, and Parts Wholesalers in the field. The new 1952 Directory contains listings in the following categories: Household Refrigeration, Commercial Refrigeration, Air Conditioning, and Parts, Materials, and Supplies. In all over 8,000 listings!

A feature of this year's Edition is the most comprehensive, accurate, and up-to-date list of refrigeration and air conditioning parts wholesalers ever assembled. Geographically arranged for ready reference.

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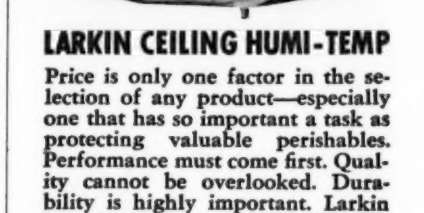

LARKIN CEILING HUMI-TEMP

Price is only one factor in the selection of any product—especially one that has so important a task as protecting valuable perishables. Performance must come first. Quality cannot be overlooked. Durability is highly important. Larkin has all of these. And Larkin has low prices, too. Compare them and see for yourself how low they really are.

For the latest Larkin price list, see your wholesaler. If you wish, write direct to us and we shall be glad to send you one.

Manufacturers of the original Cross-Fin Coil — Humi-Temp Units — Evaporative and Air Cooled Condensers — Air Conditioning Units and Coils — Direct Expansion Water Coolers — Steel Vacuum Plate Coils — Heat Exchangers.

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330 MEMORIAL DR. S.E. • ATLANTA, GA.

TO REPLACE CARBON TET FOR SHOP USE

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SEE YOUR LOCAL JOBBER

NEMA Refrigerator Sales Hit 3,209,338 Units During First 9 Months

Summary for August, September, and First Nine Months, 1951
Complete Refrigerators Only—Sales by Sizes—Units

AUGUST (16 Companies)

	Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1.	Less than 4 cu. ft.	....	....	....	....
2.	4 cu. ft.	2,463	46	156	2,665
3.	5 cu. ft.	....	....	....	....
4.	6 cu. ft.	19,652	481	2,313	22,446
5.	7 cu. ft.	22,142	114	4,278	26,534
6.	8 cu. ft.	39,659	385	7,236	47,280
7.	9 cu. ft.	27,096	507	2,331	29,934
8.	10 cu. ft.	21,738	1,010	1,303	24,051
9.	11, 12, 13 cu. ft. and up	32,559	176	1,958	34,693
10.	**Total**	**165,309**	**2,719**	**19,575**	**187,603**

SEPTEMBER (16 Companies)

	Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1.	Less than 4 cu. ft.	....	....	....	....
2.	4 cu. ft.	1,687	....	75	1,762
3.	5 cu. ft.	....	....	....	....
4.	6 cu. ft.	31,311	1	5,472	36,784
5.	7 cu. ft.	17,649	477	2,647	20,773
6.	8 cu. ft.	50,310	447	6,877	57,634
7.	9 cu. ft.	30,885	645	1,616	33,146
8.	10 cu. ft.	31,507	382	1,610	33,499
9.	11, 12, 13 cu. ft. & up	30,580	....	1,281	31,861
10.	**Total**	**193,929**	**1,952**	**19,578**	**215,459**

FIRST NINE MONTHS (16 Companies)

	Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1.	Less than 4 cu. ft.	118	....	....	118
2.	4 cu. ft.	24,526	775	4,010	29,311
3.	5 cu. ft.	1	....	....	1
4.	6 cu. ft.	224,616	10,637	28,847	264,100
5.	7 cu. ft.	330,691	8,983	38,780	378,454
6.	8 cu. ft.	992,021	12,580	81,331	1,085,932
7.	9 cu. ft.	419,508	16,277	23,854	459,639
8.	10 cu. ft.	458,170	6,670	20,926	485,766
9.	11, 12, 13 cu. ft. & up	481,857	6,040	18,120	506,017
10.	**Total**	**2,931,508**	**61,962**	**215,868**	**3,209,338**

Participating companies: Admiral Corp.; Avco Mfg. Corp.; The Coolerator Co.; Deepfreeze Appliance Div., Motor Products Corp.; Frigidaire Div., General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint Inc.; International Harvester Co.; Kelvinator Div., Nash-Kelvinator Corp.; A. J. Lindemann & Hoverson Co.; Norge Div., Borg-Warner Corp.; Refrigeration Div., Philco Corp.; Sanitary Refrigerator Co.; Seeger Refrigerator Co.; and Westinghouse Electric Corp.

* * *

Refrigerator Sales--

(Concluded from Page 1, Column 3)

manufacturers had shipped 3,209,338 units as compared with 4,622,679 for the same period in 1950. This represented a decline of 31%.

The sales loss is confined almost entirely to the domestic market, which takes the overwhelming bulk of sales. Foreign sales, including those in Canada, were just slightly less than those of last year for September and slightly higher for August. For the nine months, however, they are nearly double the figure of 1950. For the nine months, sales abroad totaled 277,830 units as compared with 141,329 for the same period last year.

N.Y. Code--

(Concluded from Page 1, Column 4)

However, he indicated that one of the matters to be considered will be the use of outsize type to mislead consumers on prices of TV receivers and large electrical appliances.

Davega said every business element connected with television and appliance advertising will be represented at meetings of the committee to be held with the Better Business Bureau, and will be asked to offer suggestions. They will include executives of furniture stores, department stores, and newspapers, in addition to appliance chain officials.

Announcement that the code was being drafted resulted in the withdrawal of summonses obtained by Commissioner of Markets Anthony Masciarelli against the Vim organization and its president, Max Kassover. The summonses charged "untrue and misleading advertising."

The summonses were withdrawn by Assistant Corporation Counsel Silas S. Lipman after Hyman Barshay, Vim attorney, told Magistrate Frederick L. Strong that Masciarelli and industry representatives had appointed the three-man committee to formulate the new code.

JUST ASK US!
Turn to "What's New" Page for useful information on new products.

CMP Allotments--

(Concluded from Page 1, Column 4)

receive such instructions should file their forms with the same office as they received their most recent allotment. Those who have not previously filed applications, should send theirs to Washington.

Though there is an acute shortage of building materials, especially structural steel, NPA urged builders of projects who were previously denied materials to file again for the second quarter and for succeeding quarters.

"They are advised to reapply in later quarters because it is hoped that the structural steel picture will improve in the latter half of 1952," NPA said.

The increase in amounts of materials that may be self-certified was included in a general consolidation of directions and amendments to CMP Regulation 1, the regulation that spells out the basic rules of the Controlled Materials Plan.

This was done, it was indicated, to cut down on the paper work at the agency. Manufacturers who fall into this class were told that if they have received advance allotments for the second quarter, they must reduce the amounts of controlled materials for which they self-certify by the amounts they will receive in these allotments.

Among the changes made in CMP Reg. 1 were:

1. An increase in the permitted time that a manufacturer may have to accept a carry-over order from one quarter to the next without charging it to the new quarter allotment. The former seven-day period was extended to 15 days.

2. "B" products were redefined to eliminate a number of products whose only controlled materials used in them consisted of other B products, such as desks when the only controlled materials used in their construction are screws, which are a B product in themselves.

3. Requires manufacturers to return to NPA the unused portions of their CMP allotments within 10 days after the close of the quarter in which the allotment was valid.

Quiet-Heet Line--

(Concluded from Page 1, Column 3)

The slow (1,100 r.p.m.) speed insures quiet operation. Evaporator fan is pressure-type blower wheel. Condenser fan is quiet overlapping blade, pressure-type propeller design. A special arrangement of condenser and fan with slinger ring insures evaporative condensate removal.

Switch and damper controls are at the top for accessibility. Thermostat is optionally available.

The ⅓-hp. model uses a Tecumseh motor-compressor assembly, and the entire system is completely welded, without gaskets or fittings. Cooling coils are copper with aluminum fins.

Specification sheets give the unit a "practical rating" (at 90° dry bulb outside condition) of 4,100 B.t.u. per hour; and an ASRE rating (95° dry bulb outside condition) of 3,850 B.t.u. per hour. Room air delivery is 165 c.f.m., and pump out is 50 c.f.m.

The 1952 version of model G5E, the ½-hp. window-type room cooler, will be marked by a new, outer housing, which will be the same as that used for the larger ¾-hp. model. This will make it possible for the user to change a condensing unit only if he should want greater capacity.

Model G5E also has a "silencing chamber" and new plastic grilles.

Base of the ½-hp. unit has been redesigned to provide greater condensate disposal. Condenser fan provides additional evaporative cooling by spraying the moisture over the condensing coils.

The ½-hp. unit will carry a suggested retail price of $279.

Model G7D, the ¾-hp. unit, will have a suggested retail price of $345, and will incorporate a number of new design features.

Cost Adjustments--

(Concluded from Page 1, Column 5)

to multi-product manufacturers.

SR 18 offers manufacturers who did less than $1,000,000 volume during their last fiscal year ending prior to July 31, 1951, a simplified method of figuring their adjustments by ignoring changes in their overhead costs.

SR 18 cannot be used by manufacturers in this category if their net sales in the first half of this year were 15% or more above sales for the same period last year.

This is because OPS figures that when sales rise considerably, overhead costs go down. The agency wants these reductions reflected in new ceiling prices.

Manufacturers who qualify for SR 18 must use either the first or second calendar quarters of 1950 (to June 24) as their base periods and use July 26, 1951, as the cut-off date for all materials and labor costs.

On this basis, they can use their base period price as the ceiling price, make only the materials cost adjustment, or both the materials and labor cost adjustment. The labor cost adjustment cannot be figured alone.

GOR 20 applies to any manufacturer (except those under CPR 34) whose sales for his last fiscal year ending not later than July 31, 1951 amounted to no more than $250,000 and where no more than 25% of his net sales during the first six months of 1950 or 1951 consisted of commodities which he bought and resold in substantially the same form.

It provides a formula of adjusting costs through the ratio of total operating cost to net sales in both the first six months of 1950 and the first six months of 1951.

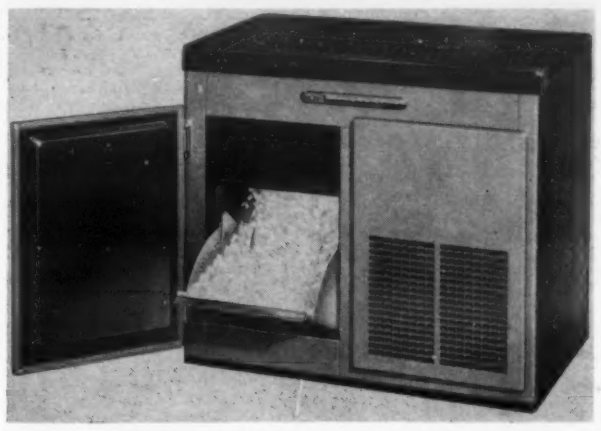
Only One Price Raised In Mitchell 1952 Line

CHICAGO—Prices of its 1952 line of room air conditioners remain unchanged except for that of the ¾-ton model which has been raised $10 to sell at $399.95, Mitchell Mfg. Co. announced.

New in the 1952 line are the 208-volt models in the ¾ and 1-ton sizes, priced at $419.95 and $479.95, respectively.

Prices of the complete line are as follows:

Model	Voltage	Hp.	Price
M 132	115	⅓	$229.95
M 122	115	½	329.95
M 342	115	¾	399.95
M 2302	230	¾	409.95
M 2082	208	¾	419.95
M 1002	230	1	469.95
M 12082	208	1	479.95



NEW FRIGIDAIRE ice cube maker features pull-down storage bin holding 100 lbs. of cubes. It can make up to 5,000 ice cubes in a day. Cabinet is built of steel and porcelain.

Ice Cuber--

(Concluded from Page 1, Column 4)

finished top. This top can be used for display, storage, or working surface. Interior of the cabinet is finished in lifetime porcelain.

Access to the cube storage bin is provided by an insulated door on the left-front side of the cabinet. The inside front of the bin pulls out and down in such a fashion as to bring the cubes out front for quick and easy removal. It has a storage capacity of 100 lbs. The cabinet walls around the storage section are fully insulated with a 3-in. thickness of fibrous glass. Thus, temperature is such in this compartment that cubes do not stick together, or melt.

Access to the top section of the cabinet is gained by simply lifting the front of the hinged top after removing two corner screws, and sliding the top forward.

Operation of the unit is said to be simple and completely automatic. A continuous stream of circulating water flows evenly over a refrigerated freezing plate so that a slab of ice is built up on the plate. When the slab of ice has frozen to a preselected thickness, thermostatic switch shuts off the flow of water and causes hot refrigerant gas to enter the freezer and release the ice slab allowing it to slide onto a unique cube cutting grid. The ice manufacturing process starts again soon after the slab has been released.

The cutting grid consists of very low voltage electrically heated wires placed at right angles to each other. Pull of gravity plus the small amount of heat in the wires, cut the ice into solid, dry cubes, which drop down into the storage bin below.

The complete refrigerating mechanism is housed in the machine compartment, located in the right side of the cabinet.

NARDA Meeting--

(Concluded from Page 1, Column 5)

cal Merchandising, will be the luncheon speaker on Tuesday, Jan. 15, discussing the role of business publication in retail business operations. Jack Canady, managing director, Appliance Merchandisers Association, Phoenix, will describe the interrelationship between the retailer and his local organization.

Many prominent retailers are also expected to participate in the program, including Vergal Bourland of Fort Worth, Tex.; Arthur Brandt of Brandt Electric Co., St. Louis; Paul Dettling of Jackson, Mich.; Mort Farr of Upper Darby, Pa.; H. B. Price, Jr., of Norfolk, Va.; Al Robertson of Oklahoma City; and P. S. Urner of Bakersfield, Calif.

J. A. Cobbey, NARDA's chief legal counsel, will address the Tuesday breakfast session and Richard E. Snyder, the association's economist consultant who conducts the annual costs-of-doing-business survey, will describe the importance of good business records and research in strengthening retail operations.

In addition to the regular convention sessions, a reception will be given for all members and their ladies, speakers, and visitors on Sunday night, Jan. 13, in the Tower Ballroom of the Conrad Hilton, and a detailed schedule of women's activities is planned for Monday and Tuesday.

The annual NARDA banquet will be held on Monday night in the Grand Ballroom. An elaborate floor show featuring Chicago entertainers will highlight the affair.

NARDA has arranged with the Conrad Hilton management to accommodate the first 300 members to request reservations through the organization. It is arranging additional housing facilities for the others in convenient hotels with good transportation to the Conrad Hilton.

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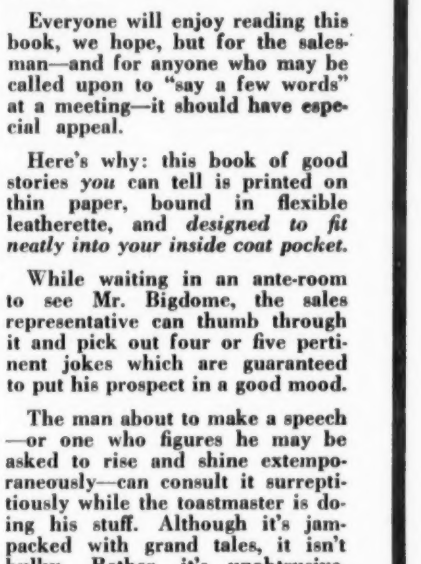

In response to hundreds of requests from AIR CONDITIONING & REFRIGERATION NEWS subscribers, the conductor of its "Inside Dope" column has collected and grouped his best "Stories of the Week." They are now available in convenient book-form for your reading and working pleasure. The book is entitled: "You'll Love This One."

Everyone will enjoy reading this book, we hope, but for the salesman—and for anyone who may be called upon to "say a few words" at a meeting—it should have especial appeal.

Here's why: this book of good stories *you* can tell is printed on thin paper, bound in flexible leatherette, and *designed to fit neatly into your inside coat pocket.*

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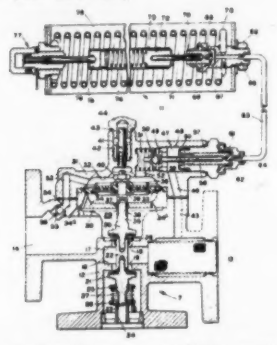
12-3-51

PATENTS

Week of Aug. 28 (Cont.)

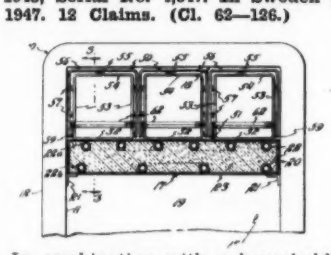
2,566,173. PILOT OPERATED VALVE. Earnest J. Dillman, Detroit, Mich., assignor to Detroit Lubricator Co., Detroit, Mich., a corporation of Michigan. Application Nov. 23, 1949, Serial No. 129.011. 4 Claims. (Cl. 236—80.)



3. In a heating or cooling system of the type having a heat exchange coil and a bypass, a valve for controlling flow of heat transfer fluid to the coil or to the bypass, comprising a valve casing and having an inlet passage and a pair of outlet passages, a pair of spaced partitions within said casing having valve ports communicable one with each of said outlet passages, said inlet passage opening into the space between said partitions, said casing having a cavity at one end intercommunicating one of said outlet passages and one of said valve ports, a power element casing secured to said valve casing and closing said cavity, a pair of valve members cooperable one with each of said valve ports to control flow alternately through said ports, the valve member closing said one valve port having a plug portion extending into said port to provide a restriction when the port is opened thereby to cause a pronounced pressure drop between said inlet passage and said one outlet passage, a valve stem common to each of said valve members, a spring cooperable with said valve stem and urging the same in a direction opening said one valve port and closing the other valve port, said power element casing having a cavity adjacent said first-named cavity, a flexible diaphragm extending across and sealing said last-named cavity and secured to one end of said valve stem, said valve stem comprising two sections interconnected by a dowel and recess connection permitting removal of said power element casing, diaphragm, and one valve stem section without further disassembly of the valve members, a passageway extending through said casings from said inlet passage to said last-named cavity for supplying liquid at inlet pressure thereto, said diaphragm being responsive to the differential between liquid at inlet pressure on one side and the pressure of liquid in said one outlet passage on the other side, a valve port in said passageway in said power element casing, a valve member cooperable with said last-named port to control the application of liquid inlet pressure to said diaphragm, a thermostatic power element in said power element casing responsive to changes in external temperature for moving said last-named valve member; said power element including a plunger having a rod portion engageable with said last-named valve member, a hat-shaped diaphragm surrounding one end of said plunger, a hollow casing member secured to said power element casing against the periphery of said hat-shaped diaphragm and defining a power element chamber, a tubular bulb element and tube connected to said casing member and opening into said chamber, a member enclosing a chamber connected to said power element tube, a movable wall member in said last-named chamber adjustably movable to determine the volume of the power element system defined by said chambers, said bulb element and tube, and said power element system being completely filled with a thermally expansive liquid; an outlet bleed passageway through said casings from said last-named cavity to said one outlet passage, said power element being operable upon opening movement of said last-named valve member to cause liquid at inlet pressure to be applied to said diaphragm to move said valve members in a direction closing said one valve port and opening the other port, and a threaded abutment member carried by said power element casing in line with said one end of said valve stem and engageable with said valve stem to provide a manually operable means for closing said one valve port in the event of power element failure.

Week of September 4

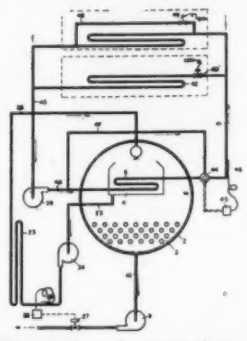
2,566,340. FREEZING COMPARTMENT STRUCTURE. Wilhelm Georg Kogel, Stockholm, Sweden, assignor to Aktiebolaget Elektrolux, Stockholm, Sweden, a corporation of Sweden. Application Jan. 27, 1948, Serial No. 4,547. In Sweden Jan. 28, 1947. 12 Claims. (Cl. 62—126.)



1. In combination with a household refrigerator comprising a cabinet providing a freezing compartment having a heat conducting bottom supporting surface and means to effect cooling of such surface, said compartment having an access opening, of removable structure in said compartment which provides one or more vertical walls therein and serving as a heat conductor in heat conducting relation with said surface for transmitting cooling effect to the upper part of said compartment when in functioning relationship, said structure being insertable into said compartment through the access opening thereof to position said structure in functioning relationship with said supporting surface, and means forming a part of said structure for insulating said heat conductor from the surroundings in said compartment when said structure is positioned in said functioning relationship, the exterior surface of said last-mentioned means being in poor heat conducting relation with said heat conductor.

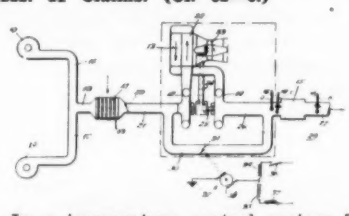
2,566,480. DUAL TEMPERATURE ABSORPTION REFRIGERATION SYSTEM. Alexis A. Berestneff, Syracuse, N. Y., assignor to Carrier Corp., Syracuse, N. Y., a corporation of Delaware. Application March 6, 1947, Serial No. 732,751. 9 Claims. (Cl. 62—5.)

1. In an absorption refrigeration system, the combination of a generator, a condenser, an absorber, and an evaporator having a pool of cooled refrigerant therein, means for controlling operation of said system, a primary heat exchanger, means for circulating cooled refrigerant from the evaporator to the primary heat exchanger, a heat exchange member in said evaporator placed in said pool of



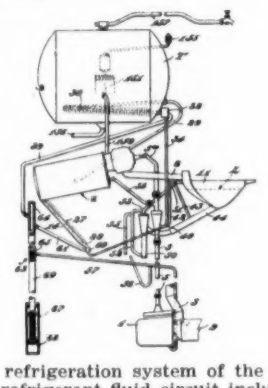
cooled refrigerant and adapted to dispose conditioning medium in heat exchange relation with the cooled refrigerant in said evaporator, a secondary heat exchanger, and means for supplying the cooled conditioning medium to the secondary heat exchanger.

2,566,617. AIRCRAFT REFRIGERATION CONTROL. Timothy J. Lehane, North Riverside, and Edward W. Johnson, Chicago, Ill., assignors to Vapor Heating Corp., Chicago, Ill., a corporation of Delaware. Application Oct. 28, 1949, Serial No. 124,222. 11 Claims. (Cl. 62—6.)



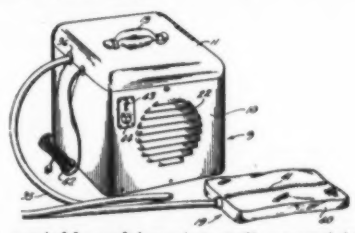
1. In a temperature control system for a pressurized aircraft cabin, the combination with means for compressing air, a primary cooler for extracting from the compressed air a portion of the heat generated by said compression, means for further cooling said air, and means for extracting surplus moisture from the cooled air; of means for controlling the temperature of the atmosphere within the cabin and for preventing possible freezing of moisture in said moisture extractor comprising means defining a conduit bypassing said cooling means and adapted to deliver a portion of the heated air direct from said primary cooler to said moisture extractor to raise the temperature of the refrigerated air therein, a valve for controlling the volume of by-passed air delivered, electrical means responsive to selected temperatures within the cabin for adjusting the position of said valve, and means responsive to a predetermined low temperature in said moisture extractor for controlling said valve adjusting means to maintain the temperature within said moisture extractor above freezing.

2,566,864. MULTIPLE STAGE EJECTOR IN REFRIGERATION SYSTEM. Lyman F. Whitney, Cambridge, Mass., assignor, by mesne assignments, to Stator Co., a corporation of Massachusetts. Application Nov. 19, 1948, Serial No. 60,957. 3 Claims. (Cl. 62—117.65.)



1. In a refrigeration system of the type having a refrigerant fluid circuit including a vapor duct and a condenser duct, a propellant fluid circuit including a pressure line and a return line, and a cooling fluid circuit, a multiple stage ejector unit comprising a housing of elongate cross-section, a first stage ejector connected with said vapor duct and with said pressure line and extending within the upper part of said housing, a second stage ejector connected with said pressure line and extending within the lower part of said housing, jackets about the ejectors having a connection with said cooling fluid circuit, the first stage ejector discharging into the interior of said housing and the second stage ejector having a vapor inlet communicating with the interior of said housing so as to receive vapors discharged by the first stage ejector, a connection between the outlet of the second stage ejector and said condenser duct, and return means from the outlet of said second stage ejector and the interior of said housing to said return line.

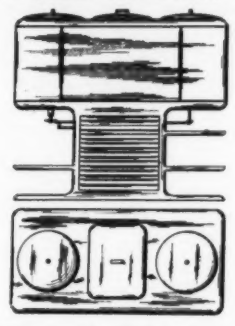
2,566,865. PORTABLE REFRIGERATOR. Ralph Wingerter, Akron, Ohio. Application Dec. 26, 1946, Serial No. 718,327. 1 Claim. (Cl. 62—4.)



A portable refrigerator unit comprising a case, a motor mounted in said case, a refrigerator unit mounted in said case and operatively driven by said motor, an automatic control means electrically connected to control the operation of said motor and the heat absorption of the refrigerator unit, a flexible refrigerator coil element operatively connected to said refrigerator unit, a storage compartment in said case designed to retain said coil element when not in use, a cover element hingedly disposed to enclose said compartment, and a carrying means attached to said cover to provide for ease of portability of said unit.

DESIGNS

164,445. REFRIGERATED BUTTER AND CREAM DISPENSING UNIT. Ronald R. Perkins, Dallas, Tex. Application March 14, 1950, Serial No. 8,512. Term of patent 14 years. (Cl. D2—3.)



The ornamental design for a refrigerated butter and cream dispensing unit, as shown and described.

AVAILABLE FOR LICENSING OR SALE

International Harvester Co. has placed this patent on the Register as available for licensing on reasonable terms, in addition to more than 1,300 registered during 1946, 1947, 1948, 1949, and 1950. The first 38 of this group were listed in the Official Gazette, Aug. 28, 1951.

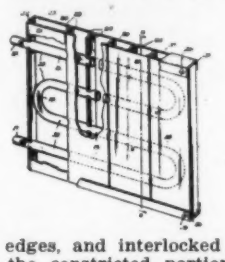
Applications for licenses should be addressed to Patent Dept., International Harvester Co., 180 N. Michigan Ave., Chicago 1, Ill.

Pat. 2,527,790. Refrigeration Apparatus Control. Patented Oct. 31, 1950. Relates to a positive automatic means for starting the engine in a refrigeration system upon a predetermined rise in temperature of the cooling chamber. Group 35—84. Reg. No. 44,273.

Week of September 11

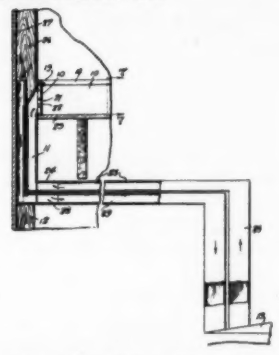
2,567,716. HEAT EXCHANGE UNIT. Richard W. Kritzer, Chicago, Ill. Application Feb. 14, 1947, Serial No. 728,579. 6 Claims. (Cl. 257—256.)

3. A heat exchange unit, comprising a coil for conducting fluid, including substantially parallel members and connecting bends, two series of plates, each plate including a face-portion and integral marginal flanges for providing fins on the coil, the face-portions of the series of plates forming walls at the opposite sides of the coil, the flanges of each series being extended to the inner faces of the face-portions on the opposite series, the flanges having open-sided apertures, with constricted portions at the outer edges of the flanges, the coil having a cross-sectional contour in tightly gripped relation



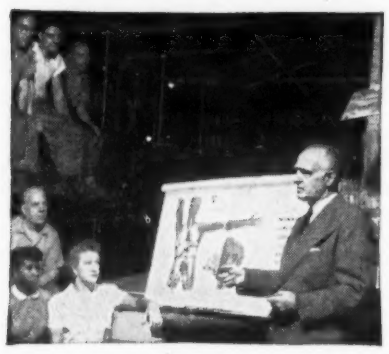
with the edges, and interlocked with the edges of the constricted portions of the apertures, by which the plates are permanently secured on the coil, with the face-portions forming the walls and the flanges secured to form fins on the coil.

2,567,789. HOLLOW BASEBOARD HEATING AND AIR CONDITIONING. Fred A. Sawyer, Uniontown, Pa.



In a heat circulating unit, the combination which comprises a hollow base board having front and rear walls connected at the lower ends with a base and having a cover with outlet openings therein, said rear wall having spaced inlet openings therein, longitudinally disposed distributing baffles of varying lengths positioned in the base board and centered on the said inlet openings of the rear wall thereof, the length of said baffles being reduced from a lower baffle upwardly, a supply header positioned below the said base board, connecting ducts extended from the said supply header to the inlet openings in the rear wall of the base board, a return header positioned below the said supply header, return ducts adapted to extend from the said return header to points in a wall against which the said base board is positioned, and branch ducts for connecting the said supply and return headers to a heat exchanger.

(To Be Continued)



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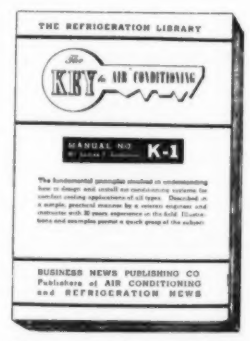
MANUAL NO. K-3—General discussion of heating systems; selection of heating coils (air friction, condensation); description and operation of evaporative condensers; water cooling towers; automatic controls; piping refrigerant, water, and steam; and insulation problems.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Government Contracts

PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the **purchasing office under which the purchase is listed** in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings at the time the request for a bid is made.

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices. **Ordnance District Offices do not have information on any other purchases.**

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
Chicago Quartermaster Depot, QM Purchasing Division, Chicago, Illinois			
Refrigerators, mechanically cooled, electric, spec MIL-R-10931A	33 ea	52-638 B	5 Dec 51
Valve assembly	2000 ea	52-643 B	6 Dec 51
Officer In Charge, Navy Purchasing Office, Washington, D. C.			
Gate, valve, flanged, 1500 No. AT 900 Deg F 900 No. at 900 Deg F, Globe Valve, stop check valve, angle valve, angle stop check valve, 600 No. at 900 Deg F	136	4912-S-B	27 Dec 51
Supply Officer, Code 532, Naval Shipyard, Portsmouth, N. H.			
Valves, angle and globe, air conditioning system	15 itm	102-8668	10 Dec 51

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Reference No.	App. Bid Date
General Services Administration, 630 Sansome Street, San Francisco, California			
Alexico, California, U.S. Border Station, alterations to air conditioning system		CR-1367	12-5-51
Regional Information Officer, Region 3, General Services Administration, Washington 25, D. C.			
Air conditioning of Audio Laboratory, Tempo I, Washington, D. C.		(GS-R3-B-1378)	12-5-51
Portable drinking fountains.		CLASS 63	1-4-52

CONTRACTS AWARDED AS OF NOV. 23, 1951

Headquarters, U. S. Marine Corps, The Quartermaster General, Washington 25, D. C.

Flake Ice machines.—25 ea., $43,750.—Ajax Corp. of America, 2509 E. Washington Ave., Evansville, Ind.

The Naval Supply Depot, Proc. Branch, Great Lakes, Illinois

Regulator valves.—110 ea., $16,940.—Grove Regulator Co., 6529 Hollis Street, Oakland 8, California.

Warm Air Heating Group Will Hold Meeting In Cleveland Dec. 5 and 6

CLEVELAND—The 38th annual convention of the National Warm Air Heating and Air Conditioning Association will be held at Hotel Cleveland here Dec. 5 and 6.

Information on marketing opportunities, sales and selling, governmental controls, labor relations, and technical advancements affecting the warm air heating industry will be presented at the convention, according to C. S. Franke, president of the association.

Sales opportunities in the new home market, which the group thinks will have to provide a more substantial portion of furnace sales in 1952, will be discussed by Richard N. Jones, advertising sales manager of *Building* magazine.

Rural market possibilities will be outlined to the furnace group by Victor Hawkins, research director of Capper Publications, Inc. Another discussion on sales is scheduled to be presented by James C. Olsen, partner of Booz, Allen & Hamilton, management consultant firm.

Technical developments of interest to the association are to be presented the afternoon of Dec. 6 by two members of the University of Illinois research staff: R. W. Roose and M. E. Childs.

Also of special interest to members and guests will be an address by Senator Everett M. Dirksen of Illinois who will be guest speaker at the luncheon on the first day of the convention.

Other speakers on the convention program include William L. McGrath, president, Williamson Heater Co.; J. D. Wilder, executive secretary of the Sheet Metal National Contractors' Association, and the following who will give committee reports:

M. I. Levy, president, Viking Air Conditioning Corp.; Dr. W. C. Davis, market research manager, General Electric Co.; Dean L. G. Miller, Michigan State college; F. L. Meyer, Meyer Furnace Co.; T. I. Byrd, Lau Blower Co.; C. W. Nessell, Minneapolis-Honeywell Regulator Co.; H. T. Hess, Vorys Bros.; G. A. Voorhees, technical secretary for the warm air association; and C. L. Sapp, Farquhar Furnace Co.

Dept. Store Sales Up Over Same Week In '50

WASHINGTON, D. C.—Department stores averaged a 6% greater dollar volume during the week ended Nov. 10 than they did in the comparable week a year ago, the Board of Governors of the Federal Reserve System reported recently.

Sales gains over a year ago were reported in all Federal Reserve districts except Chicago where no gain was noted and in St. Louis where they declined 2%.

Elsewhere, sales gains ranged from 1% in the Minneapolis district to 17% in the Boston district. Gains for other districts were as follows: Cleveland and Dallas 12%, Atlanta 11%, Richmond and San Francisco 8%, New York and Kansas City 6%, and Philadelphia 4%.

New Porcelain Enamel Process Said To Result In Considerable Savings

CLEVELAND — Considerable savings are seen for users of porcelain enamel with the development of a new process for finishing porcelain enameled products such as household appliances.

Developed jointly by Republic Steel Corp. and Ferro Corp., the process permits application of a single coat of enamel directly to enameling iron and many cold rolled steels, according to D. D. Clawson, Ferro president. He explained that this process eliminates the ground coat or the need for using premium steels.

Clawson said it may be some time before the patented process can be successfully adapted to all the finishing requirements of the industry. But he predicted that it would be widely used in the next few years and that it would greatly expand the use of porcelain enamels.

Cleaning and rinsing of steel in preparation for pickling and application of enamel to the steel are done in the usual way. However, a special pickling process produces a sharper etch than the conventional sulphuric acid pickle.

Main feature of the development is use of a non-galvanic nickel deposition process which provides the rough surface needed to give the steel the required adherence, Clawson revealed. He said the one-coat finish is only half as thick as ordinary porcelain-enamel coatings.

"Products enameled in this way can be sent, drilled, sheared, and sawed with clean edges," Clawson stated. "Surface, reflection, and color qualities are equal to conventional finishes."

He added that the process has been used commercially by one of Ferro's customers for the past several months.

Sweden Freezer Names 2 Authorized Sellers

SEATTLE—Sweden Freezer Mfg. Co. has announced the appointment of two new authorized sellers, Dakota Food Service Equipment, Inc. of Fargo, N. D., and Bivins & Co. of Amarillo, Tex.

Dakota Food Service was founded in 1947 by Donald E. Nelson, a North Dakota Agricultural college graduate. In addition to the new firm, he has successfully operated a local restaurant for the past 17 years. His wife, Lois L. Nelson, is secretary-treasurer for the company, and Wallace Erickson is office and credit manager. There are four additional sales representatives. Besides the Sweden Freezer the firm carries a complete line of restaurant equipment and has recently added a line of staple food products.

Bivins & Co., organized by W. R. Bivins, began as a one-man company in 1941 and has grown to a seven-man sales organization. J. Del Pret joined the company in 1945, C. C. Joslin in 1947, and B. C. Joslin in 1948.

Search your plant for iron and steel scrap . . . help our country to get enough steel

It takes scrap . . . to make steel.

Multiply the amount of iron and steel scrap in your plant by 2 . . . that's the amount of steel that could be made if that scrap were salvaged.

Today, there's not enough scrap coming in from normal sources to keep steel mills and foundries producing at capacity.

YOUR JOB IS CLEAR —GET IN THE SCRAP

IN ORDER TO KEEP STEEL C...

NON-FERROUS SCRAP IS NEEDED TOO!

A PUBLIC SERVICE PROJECT — THE ADVERTISING COUNCIL

Are Refrigeration Men Sharp?

In case you have any doubts, hark to this story. Viking Copper Tube Co. exhibited a roll of its copper tubing at the All-Industry Show and sought estimates of its length. (At left, Charlie Logan, Viking district representative, looks on as Pam Martin pins a "guesstimate" ticket on W. E. Ural, Victor Products Corp.) At right: "Chuck" Sanford, Viking sales manager, presents outboard motor to winner, Vernon Tupper Jr., Nashville, Tenn. Length of coil was 1,110 ft., 10½ in. Tupper's guess: 1,110 ft., 11 in. His margin of error: ½ INCH.

Rogerio Azcarraga, Mexican Appliance Mfr., Dies After Show Visit

DETROIT—A prominent Mexican appliance producer died here suddenly following a visit to the Seventh Annual All-Industry Refrigeration Show in Chicago.

Rogerio Azcarraga, president of Corporacion Nacional Distribuidora of Mexico City, Kelvinator distributor, died in his sleep of coronary thrombosis in his hotel room, Friday, Nov. 9.

Azcarraga was a member of one of Mexico's most prominent families. His death came as a shock to his many friends in this country, and to the Mexican business and financial world. At the time of his death he was traveling with Hector Orozco, his plant engineer, and Henry Schwartau, Kelvinator field representative for Latin America. The party had spent three days at the All-Industry Show, and one day in conference with company officials at Kelvinator's Detroit headquarters.

Azcarraga was the owner of Mexico's newest refrigerator assembly plant, which was opened in July of this year in Mexico City. The plant produced current Kelvinator models, using mostly made-in-Mexico parts. It was operated with Mexican capital and a Mexican staff, with the help of U. S. technical advice.

The funeral was held Nov. 12 in Mexico City. The body was transported from Detroit by air. Surviving are Azcarraga's widow, a son, and two daughters.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" $5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications $7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

AVAILABLE - JANUARY 1952. Eighteen years of thorough background in the air-conditioning, refrigeration and ventilating business. Operated own sales and service organization for past eight years. Seeks connection where talent and know-how can be utilized. Would prefer New York or New England area. Will travel. BOX 3864, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

LABORATORY TEST engineer—with established firm specializing in evaporator and heat transfer components. College graduate preferred, however, adequate experience accepted. Best working conditions, paid vacation, etc. Excellent opportunity for advancement. Give full particulars in first reply. State salary expected and how soon available. BOHN ALUMINUM & BRASS CORPORATION, Plant 13, Refrigeration Division, Adrian, Michigan, Attention: S. S. Bartlowe.

FIELD ENGINEER—popular manufacturer of automatic control valves for refrigeration, air conditioning, and heating. Will contact manufacturers in connection with the development of new products. An opportunity in a progressive organization for a man with initiative and imagination who can effectively work with people. Engineering background with experience in above field required. Write BOX 3867, Air Conditioning & Refrigeration News, giving complete information including age, education, experience, responsibilities, earnings, etc.

SALES ENGINEER—Position with young aggressive Frigidaire commercial dealer in Detroit area. Excellent opportunity to get in on the ground floor with our expanding program. Salary, commission and expenses. Write for appointment giving brief history and enclose snapshot of self. All correspondence strictly confidential. Write BOX 3871, Air Conditioning & Refrigeration News.

AIR CONDITIONING salesman, top rank only. Wonderful opportunity for experienced man to make better than $12,000 yearly. Wealthy metropolitan area, little competition, plenty of sound leads from continuous advertising. We pay for interview, so you have everything to gain by writing full details to BOX 3872, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

CARRIER MODEL 17M42-5-4 centrifugal refrigeration machine originally installed in 1940 complete with low pressure Murray steam turbine drive and steam condenser. Original capacity based on 165 tons cooling $CaCl_2$ brine to 20°, but can be used for water chilling on air conditioning duty with capacities up to 240 tons. Used very little—excellent condition—immediately available, call or write BUNTE BROTHERS, 3301 West Franklin Boulevard, Chicago 24, Illinois—Phone KEdzie 3-5200, Mr. E. W. Holland.

SURPLUS INVENTORY 350 ⅛ H.P. Motors 115 volt D.C. 1750 RPM equipped with manual reset motor, overload protector and automatic belt tightener. $21.00 each for all or part. NASH-KELVINATOR CORP., Purchasing Department, 14250 Plymouth Rd., Detroit 32, Michigan, Attention: W. R. Stowe.

FOR SALE—Standard makes-new hermetic units-static & fan-cooled cond. ⅛-⅙, ⅕, ¼, ⅓. Open units ⅓, ½. Relays and overload protectors. Driers, T.X.V. valves, pressure controls, belts, fittings. Water-cooling coils for carbonated water. Send for your lists and prices on our many other parts and supplies at great savings. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln, Chicago, Ill.

BUSINESS OPPORTUNITIES

FOR SALE: Well established commercial refrigeration business located in Central Florida and handling only national known brands. Easy terms can be arranged. BOX 3850, Air Conditioning & Refrigeration News.

ESTABLISHED AIR conditioning business in hottest middle west territory, medium large city with 23 high potential counties. Excellent location and lease, many fine prospects for 1952. I do not need the money, so little cash is needed. Buy this profitable business with your credit. Priced to sell quickly as owner has other interest. Give your financial standing and credit in first letter to BOX 3873, Air Conditioning & Refrigeration News.

MISCELLANEOUS

"SEALED UNIT Rebuilding-Basic Tools & Methods" now in its third and final printing. This course of trade secrets gives complete information on equipping a shop to handle this work. Information found nowhere else. $12.50 while supply lasts or write for details. H. CUSTER, Box 98, Center Line, Michigan.

SURPLUS STOCK copper type L hard new pipe and fittings. All sizes & style fittings up to 4". Special reducing tees in all combinations. Will ship any quantity. Also several used coils in excellent condition 3 to 15 ton DX or water. All subject to prior sale. GENERAL AIR CONDITIONING, 804 N. Sheridan, Peoria, Illinois.

HERMETICALLY SEALED units remanufactured. One year warranty. Norge all models, Hotpoint, G. E. (bottom units), $49.50. Coldspot, Frigidaire, Westinghouse, Crosley, Kelvinator, to and including ⅓ H.P., $45.00. Other models priced on request. We pay incoming freight. Return shipment forwarded C.O.D. NORD HERMETIC CO., 1701 San Leandro Blvd., San Leandro, California.

Los Angeles TV Ad Standards--

(Concluded from Page 1, Column 3)

date, however, only three radio stations had indicated their support of such a move. No TV stations had replied.

LETTER CITES STAND

A letter sent to the stations cited the stand taken by the publishers' association with respect to advertising by the National Sewing Machine Co. The company lost its "privilege" of advertising for alleged "bait" and misleading advertisements. Local daily newspapers refused to accept advertisements from the company until it agreed to comply with the LANPA's standards.

The BBB's letter said:

"The purpose of this action by the LANPA is not only to protect readers of member publications against deception and fraud in advertising, but at the same time protect legitimate business concerns from unfair competitive practices. Such action builds confidence—'bait' copy destroys confidence. . . ."

Robert M. Sample, vice president of the Los Angeles BBB, said the LANPA "has become the driving force in this city's fight for reputable advertising. They are to be congratulated for blazing the trail in what has been a wilderness of misleading radio, television, and newspaper advertising."

STANDARDS LISTED

The standards being supported by the newspapers follow:

1. Model number—The model number as designated by the manufacturer shall be stated.

2. Famous makes—If any reference to the maker is made, the name of the manufacturer shall be stated.

3. Quality phrases and manufacturers' names—When phrases such as "Du Mont tubes" or "RCA licensed" are used, the qualifying word or phrase, such as "tube" or "licensed," shall immediately follow the manufacturer's name in the same size type.

4. Advertised price and extra equipment—A. Advertising shall not represent or imply that the advertised price of a television set includes all equipment, accessories, or service necessary for the set to operate when such is not a fact.

B. When it is obligatory to purchase equipment, accessories, or service along with the television set at the advertised price, it is necessary to so state.

5. Misleading claims—Such terms as "X store is first with" or "only at X store" shall not be used when the same merchandise at the same price is available at competitor's store.

6. Trial offers—A. Trial offers shall be clearly stated to avoid misunderstanding as to their true meaning. B. A "home demonstration" in which a set is not left in the home for trial purposes without cost or obligation to buy, shall not be described as a "trial offer."

7. Size of picture tube and color—A. The diameter of the circular tube or the longest dimension of the surface of a rectangular tube shall be given, i.e., 10-in., 12½-in., etc. Only such description of picture tube size shall be used. The number of square inches of viewing space may be stated providing the diameter of the tube, i.e., 10-in., 12½-in., etc., is also quoted in conjunction.

B. Reference to or illustration of picture size of projection receivers shall make clear that the size is by projection.

C. Advertising offering "colorvision" or "colorview," etc., shall not be used unless tubes contain electronic color scanning devices. If the term "color" is used with reference to layers of cellophane or painted picture tubes, it must be clearly so stated.

8. Prices with illustrations—A. Prices quoted in conjunction with illustrations of cabinets or stands holding television sets shall state whether or not such cabinets or stands are available with the set at the advertised price. Such statements must be included in the descriptive copy in the same size type accompanying the illustration.

B. When a price is featured in advertising and one set is also featured then the two shall refer to each other—featured price buys featured set.

9. Guarantees and warranties—Any guarantee or warranty shall be clear and specific as to its full terms and conditions. An advertised guarantee shall be understood as the responsibility of, and to be fulfilled by, the advertiser, unless otherwise qualified.

10. Trade-ins and down payments—A. Any trade-in allowance shall be an amount deducted from the advertiser's current selling price of the offered merchandise when sold without a trade-in. A general trade-in offer shall apply to all merchandise, including the article advertised.

B. Such terms as "no money down" or "no cash down," or any similar term shall not be used unless statement is qualified adjacent to the phrase, that such terms are available only if a trade-in is equal to the amount of the down payment.

FOR
COOL
PROFITS
TIE UP WITH
TYPHOON
PACKAGED AIR CONDITIONERS
1½ TO 20 TONS
EVAPORATIVE CONDENSERS
3 TO 20 TONS
Over 40 Years of
Air Cooling Experience
TYPHOON Air Conditioning Co., Inc.
794 Union Street, Brooklyn, N. Y.

AIRO stands for
Fast, dependable, world-wide service.
Refrigeration and Air Conditioning parts and supplies.
Write for current Catalog
AIRO SUPPLY CO.
2732 N. Ashland Ave., Chicago 14, Ill.

Universal--

(Concluded from Page 1, Column 5)

will have direct charge of refrigeration production sales.

E. L. "Hoop" Farquharson, formerly laundry equipment manager of Landers, Frary & Clark, will be vice president, laundry equipment sales.

Harry Payor, formerly manager of the water heater division of Landers, Frary & Clark, will be vice president in charge of range and water heater sales.

R. H. Money, vice president in charge of engineering at Artkraft and Baltimore, will hold the same position in the new company. He was chief engineer of Crosley for 16 years and is a past president of the American Society of Refrigerating Engineers.

Andrew R. Grierson, vice president in charge of manufacturing at Artkraft and Baltimore, will have a similar position in the new firm. He has had experience in the manufacture of the Bendix home laundry, Norge home appliances, and Kelvinator refrigerators, and was in charge of the special tool division of Ford Motor Co. before going into the appliance field some 17 years ago.

George J. Madill, formerly vice president and works manager of Artkraft, will be vice president and works manager of the Lima division of the company.

It was announced earlier that R. R. Trubey, who has been chairman of the board of Artkraft and president of Baltimore Porcelain Steel, will be chairman of the board of the company and will be active in the general management of the business.

Landers, Frary & Clark has a substantial though minority interest in the new organization but is not participating in the management, production, or sales.

The new company plans to produce the ranges and washing machines in its Baltimore, Md. plant and the refrigerators and home freezers in Lima, Ohio.

Tools, jigs, dies, fixtures, etc., together with presses, welders, and other machines are being moved from New Britain and production will soon be under way on electric ranges and washing machines.

Clark said he would devote a major portion of his time to the sales program of Universal Major Appliance.

Gesco Sets Up 4 Regions In Decentralization Move

NEW YORK CITY—The General Electric Supply Co. has launched a general reorganization of territories and executive responsibilities in preparation for an expected general increase in business activity after the Korean war and to reflect a company policy of decentralization.

Under this plan, Gesco has divided the country into four regions, and effective Jan. 1, 1952, will put a vice president in charge of each region.

The regions and vice presidents are as follows: Northeast—C. T. Shropshire, formerly district manager in Philadelphia; central—D. B. White, formerly district manager in Buffalo; southeast-southwest—R. A. Clark, formerly district manager in Atlanta; and west—H. C. Gerster, formerly Los Angeles district manager.

The number of districts will be increased from 36 to approximately 48. The new districts will be created out of old districts and will not mean opening up new areas.

District managers will be given complete operational authority and authority to contact directly the vendors whose lines their houses handle. In many cases they will report to the regional vice president rather than the company president.

In the vast majority of Gesco outlets, sales responsibility will be broken down so that there will be separate sales managers for white goods, radio and television, and electrical housewares. In other cases, the same sales manager will have responsibility for both radio and television and electrical housewares.

Westinghouse Service Center--

(Concluded from Page 1, Column 3)

car or truck equipped with repair tools and a general supply of spare parts.

The Center has ample parking facilities for those customers who want to bring in small, easy to handle appliances and save themselves the cost of a home call by the serviceman.

The customer service counter is in the lobby of the Center and is manned by an experienced serviceman who checks the appliance at the counter. The counterman tells the customer what repairs are needed, how long it will take, and the approximate cost. He then writes a ticket and the appliance is routed to the proper repair department.

When the repair is completed, a postcard is mailed to the customer stating that the appliance is repaired and ready to be picked up.

Since some dealers prefer or find it necessary that their customers bring service problems direct to them, a full program has been set up for them. It is a one-stop service for such dealers. It saves the dealer time and hauling costs.

A "will-call" service for replacement parts enables the dealer to call in his order and it will be wrapped and ready for him when he calls. A special "will-call" counter has been set up for this job.

Reconditioning of trade-ins is another dealer service. A receiving department will handle the writing of the order for work to be done.

The Center will handle everything from a thorough electrical and mechanical check to refinishing and the rebuilding of hermetically-sealed refrigeration units. Interiors of refrigerators, for example, will be cleaned and sanitized. The Center will use factory assembly line techniques on reconditioning work on old appliances.

The dealer bug-a-boo of television set servicing will be completely handled by the Service Center, including the issuing of 90-day or one-year service contracts, with or without antenna installation, as well as the renewal of such contracts.

The television repair shop is manned by factory-trained experts using factory-approved parts. Outside servicemen will make all adjustments they can in the field and if service is not possible in the field, the outside man will bring the set to the Service Center.

C. M. Shreeves is in charge of the Service Center. He will report to Baxter.

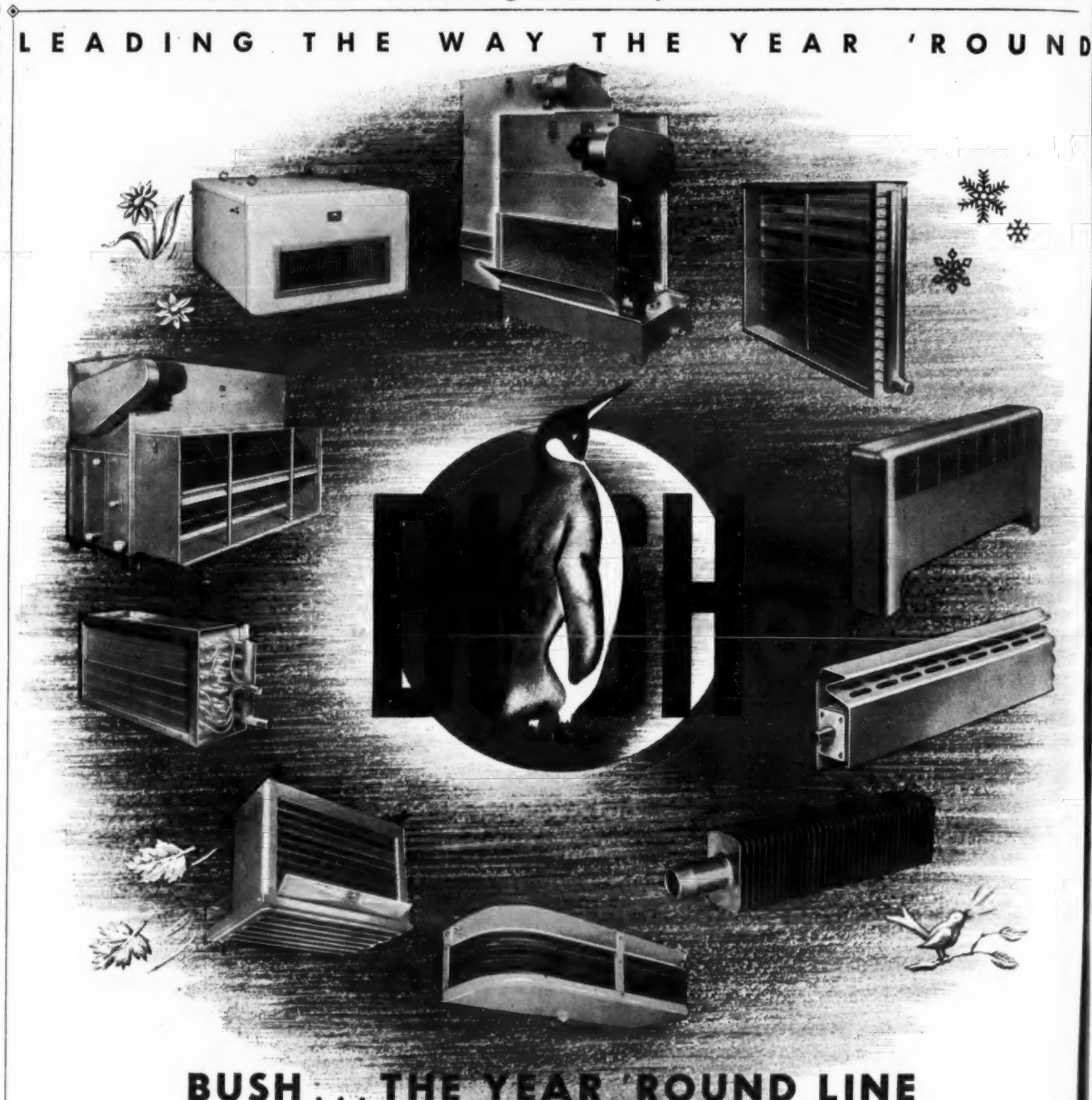
Fire Hits Wallwork Bros. Outlet In Newark, N.J.

NEWARK, N. J.—A disastrous fire destroyed the Wallwork Bros. Inc. outlet at 120 N. 11th St. here on Nov. 17, the company reported recently.

The refrigeration and air conditioning equipment parts wholesaler reported that all records and office equipment were recovered and that business was continued using stock from the Avon and Montclair branches.

The refrigeration and air conditioning departments were temporarily moved next door to 122 N. 11th St.

LEADING THE WAY THE YEAR 'ROUND



BUSH . . . THE YEAR 'ROUND LINE

Autumn, winter, spring and summer, there's a Bush unit to handle the heating or cooling requirements for product or comfort. Air Handling units and Comfort Conditioners to take the "dog" out of the summer days; Unit Coolers and Product Coolers, Evaporative Condensers and Cooling Towers for year 'round use; water and steam coils, convectors, finned pipe radiation and baseboard convectors offer a fall and winter line for industrial and domestic heating; condensers, special coils and other heat transfer products all combine to offer the smart businessman a year 'round profit line.

Investigate this opportunity now by contacting the nearest Bush Representative or write the factory direct.

Complete catalogs containing valuable engineering data and specifications available upon request.

Bush Manufacturing Company
WEST HARTFORD 10, CONNECTICUT
Since 1907